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Presented by

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Lectures Delivered by Dr. Rush

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COLLEGE OF PHYSICIANS
OF PHILADELPHIA

Therapeutics may be defined, the art of curing diseases, founded on a knowledge of their causes—

COLLEGE OF PHYSICIANS
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Lecture 1 —

On the Blood —

The Human Body is divided into Solids, & Fluids, — the Solids are subdivided into Living & Simple — the Living are the Muscular Fibres & Nerves — the Simple are — Bone, Cartilage, Tendons, Membranes &c — the Fluids are — the Blood & Juices secreted from it — the secreted Fluids are divided into Usefull, & Excrementitious — the Usefull are — the Semen, Blood, Saliva, Gastric Juice, Bile &c — the Excrementitious are — the Urine Sweat &c —

The Blood appears to be a Simple homogeneous Fluid — a halitus escapes from the Blood, as soon as it is drawn, from the Body — the quantity differs, according to the heat of the Blood — or Surface of the Vessel that contains it — It is not necessary that it should be of a Red Colour, for the blood of some Animals — as of Fish is of a Whitish Colour —

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It first separates into Serum & Crassamentum the Crassamentum is composed of Red Globules and Coagulable Lymph — the Serum is not of a homogeneous Nature — it is Coa= -gulated by heat — when exposed to heat, a Halitus escapes from it — the Serum & Crassamentum are kept together by heat — Let us now examine the Red Glo= -bules — they were supposed by Lieuenhoeck to consist of six smaller ones — they are not miscible with the other parts of the Blood — Some suppose them to be of an Oily Nature and this to be the reason of their astonishing but this is false — They have been supposed to be of an watry nature — but they are of an Inflammable Nature — On what does their Colour depend? — On Dephogisticated Air — this has lately been proved by Dr. Goodwin, in his Treatise on Respiration — The Red Globules may serve for Nutrition — and for promoting the Growth of the Body — The White of an Egg is more of a bland Nature than the Ser=

of the Blood. — there is an Analogy between the Serum of the Blood, & the White of an Egg — they are both Coagulated by Acids, and Alkalies — and both serve for the Nourishment of the Body — little dependance is to be put on the appearance of Blood —

The Coagulable Lymph seperates sometimes in the Body, when there is not heat enough, to keep them together —

It is this Gluten that gives the Buffy appearance on the Blood — this Buff is more common in Pregnancy, owing to the Action of the Arteries, being greater, which thins the Blood; and produces it, agreeable to Mr Hewsons Experiments.

One fact which I cannot account for, (viz) an Earthen Vessel, he says will assist in the formation of the Buff, — The Serum is composed of an Ammoniacal Salt, dissolved in water — the Acid is the Phosphoric Acid — the Acid renders the Coagulable Lymph, more easily dissolved in the Serum — What proportion do the

Parts of the Blood bear to each other? —
they are different in different subjects,

The Chyle has been considered as a part of the Blood — tho not evident to our Senses, — Coagulable Lymph has been taken for it — Is there any Oil in the Blood? — We have no proofs of its existing formally in the Blood — Does the Blood contain Air? — Yes but in a semi elastic State —

Lecture, 2d —

On Morbid Tenuity of the Blood

Are there any proofs of a Morbid Tenuity in the Blood? — there are no proofs in favour of the Question — The first cause, producing it has been supposed to be, too great a quantity of watry Liquors, taken into the Body. — 2d It is said to take place when the Urine is Obstructed, as in the Ischuria Renalis, but this is only Temporary — It does not take place, when

we expect its presence — as it does not take place more in Dropsy, than any other Disease - it may perhaps in Scurvy take place — In Scurvy the Properties of the Blood are Changed — It is difficult to account for the Blood being supposed to be the Seat of so many Diseases, — the Aliment we take in, is of a bland Nature — the Farinacea make the Diet, of the greatest part of Mankind — they undergo a Fermentation in the Stomach — the mixture of ~~the~~ Blood with the Saline Substances, ~~with~~ Boerhaave supposed 99 times out of an 100 to be the Cause of Disease —— Can Acrimony produce Disease in the Blood? — No for the following reasons — 1 - From the Contents of the Stomach — 2 - From Dilution — 3 - From the Oil in the Blood, 4th — From the Emunctories, which discharge it — 5th — From the Heart, and Arteries, which are not affected by Acrimony, if in the Blood: as the Acrimony,

in Scurvy appears in a living State - not as a Direct Stimulus to the heart - but as Indirectly, by the medium of the Brain, Next we shall Speak of the Specific nature of these Saline Substances —— 1 - Of the Acid Acrimony, much has been said of this, by Dr - Boerhaave, - that an acid is evolved in the Stomach by Fermentation; is a Doctrine, generally established - & adopted by Physicians — But it may be destroyed - 1 - By the Bile, containing an Alkali - neutralizing the Acid - & as a Bitter - may destroy Acidity —— 2 - By diffusion 3 - If an Acid was not neutralized by an Alkali in the Bile - the Lacteals would refuse to admit it - and if it was admitted would be too generally diffused through the Mass of Blood — 4th - No Experiments prove its existence, in the Blood —— 1 - In favour of an acid Acrimony in the Blood - the Acid of Milk, has been produced; but this

is proved to be evolved by Fermentation—
2d Acid Sweats—but how this can happen
when the Blood is not Acid, we cannot
tell—who would say Marine Acid, and
Apples are the same by the Smell only—
but this renders it impossible, that no
Effervescence ensues—

2d—Of an Alkaline Acrimony, and
first of the fixed Alkali—Can this exist in
the Blood?—There is no proof that it does
exist in those Persons, who have taken it
to dissolve the Stone—as Green Tea, and
Cold Water produce the same effect—If they
were taken into the Blood, they would
be discharged by the Kidneys—but no
Person has ever turned the Sirrup of
Violets to a Green Colour, by the Urine—
or made it Effervesce with Acids—But
what shall we say to Dr Fowhams facts—
of the appearance of the Blood?—he
has neglected to inform us the Appearance
the Blood puts on, in the Cases he mentions—
Alkalies may dissolve the Blood, by

destroying the Acid in the Stomach, as by eating much Animal, or little Vegetable Food — one fact is produced of an Alkali existing in the Blood. If we mix the Syrrup of Violets, and the Serum of the Blood, they produce a Green Colour — but any person acquainted with the Doctrine of Colours, knows that Yellow, and Blue, produce a Green — we conclude that there is no Alkali, in a formal state in the Blood in Disease — Is there a Vol. Alk. in a seperate state in the Blood — ? — Dr. Gaubius supposes, it does exist, from the great use of the Vegetables, of the 15 Class; or Tetrodynamia of Linæus; but it would be Neutralized by the Acid of the Stomach — No Vegetable contains a Volatile Alkali, in an uncombined state, — Dr. Gaubius tells us it may be decomposed by fixed Alkalies joining the Acid of Phosphorus; — before we have already proved, that a Fixed Alkali, cannot enter the Blood — he says that Aromatics produce it when taken in

quantities large enough to produce this effect—

Poisons are said to produce it by Putrefaction, But I think they act by inducing Indirect Debility— Something like Putrefaction, may happen in Gangrene—— In France they use Volatile Alkali, as an Antidote to Poisons—

3d— Of Neutral Salts, in the Blood—— they are generally produced by Art.—— Common Salt, I think never exists in the Blood formally; but is changed into an Ammoniacal Salt, called the Essential Salt of Urine— it is only this Salt, which produces Alkaline Acrimony in the Blood— How is the Blood, in certain Eruptions?—— I do not think, they arise from any bad State of the Blood— Eruptions are supposed to arise from an Acid Acrimony in the Blood,— they are altogether Local, or depend upon another Cause— We shall speak of them in another Place——

Lecture 3d—

Life appears to be a forced State; it is kept up by the application of Stimuli, these Stimuli, are either External or Internal— the External

B. Q. ripates acrimony & Tenor
su Cullens Physiology & M. Medica

are Heat, Light, Exercise, Sound, & Pure Air — the Internal are — Food, Drink, Tension of the Glands, containing Secreted Liquors. Exercise of the Understanding, particularly, Hope, Love, Joy, and Anger; these are said to be Direct. The Indirect are, either External or Internal; the external are, Cold, Darkness, and Silence, the internal are abstinence, Evacuations by Stool, and certain passions of the Mind, as Fear, Grief, & the sense of Shame, they increase Motion, and lessen Action, as the Pulse from Bleeding. — Excitability abounds most in Infancy, & is soonest dissipated from them — the Direct Stimuli are the Powers, which support Animal Life, & the Indirect which conspire against it, — It is the gradual Accumulation of this Power, or Property of Animal Bodies, that produce wakefullness, I will suppose and Strength — and it is the waste of it which produce Sleep, and weakness — I will suppose the point of their healthy Action to be 80 — and they are in a Morbid Excess, when they exceed 60 — or fall below 40 —

When they fluctuate between 60- and 40- they produce only a Predisposition to a Disease—
It is only when they arise above 60, or fall below 40, that they produce an actual Disease—
All Diseases consist in actual Debility; or originate from a Predisposing Debility—
This Debility is of two kinds Direct, and Indirect— When the Stimulating Causes are excessive in their Operation (viz) when they exceed 60, the boundary line of Predisposition, they produce Indirect Debility—
(e.g.) Heat is a Stimulus, it encreases Excitement, & imparts Vigour to the System— at 70, and in some habits at 80 of Farenheits Scale— but when it exceeds 90, it produces Indirect Debility from its excess— hence the Langour we feel, in a hot Day. when the ☉ rises suddenly beyond 85 or 90°—
a gain Cheerfulness, is a gentle Stimulus, but if arises to Joy, & this Joy continues, for some time, it Stimulates to excess, and produces Indirect Debility— hence the weakness, & Dejection of Spirits, we feel, after a high Tide of Joy. so does Anger—

and all the ~~Debilitating~~ Stimulating Passions, produce Debility. — Direct Debility, is produced by the Abstraction of Stimula=ting Powers, Evacuations whether by, V. S. Purging, Vomiting also Abstinence from Food, produce Debility, only by the abstraction of a Customary Stimulus, Fear, Grief, Guilt and Shame produce Direct Debility only by Abstracting Courage &c — There are degrees of Excitement, from the most profound Sleep; up to Tonic Madness — the 1st is profound Sleep without Dreaming — 2d Sleep with Dreaming. 3d The wakefull State, — 4th That great Degree of Excitement caused by Spiritous Drink, or Tonic Madness —

The Remote & Predisposing Causes of Diseases —

The Causes of Diseases are very numerous, 1 — The mode of Living of women during Pregnancy, — as the Sedentary Life of the Rich

and the indifferent one of the Poor, predispose Children to many Diseases — 2d — Children are Predisposed to diseases from Accidents — received during Birth; such as a deformed Head, Chest, or otherwise — 3d — Children are subject to Disease from the absurd Practice of Nurses — just after Birth, washing them with Spirits — 4th — They are subject to Disease from their Dress — as Tight Caps, & Clothes, which Op= =erates by causing a Partial Circulation — 5th — From the application of Spiritous Liquors to cure their Diseases — 6th — From their first Diet, which is very improper — 7th — From the premature application of the Mind of Children to Study, long confinement the Tyranny of Schoolmasters & their not unfrequently united &c — excessive exertions in Play- =days the Foundation of Pneumonic Complaints — 8th — Transitions from Childhood to Puberty, and from Puberty to Manhood, — 9th — The Tyranny of Schoolmasters subjects Children to Diseases — 10th — Idleness in the Female Sex, disposes

them to very distressing Disorders —

11 — The prevailing Fashions among them, such as not covering their Breasts sufficiently — having their Clothes too Tight, and wearing Enormous Cushions — these produce partial Circulation, Pains, Cholic, Asthma, & Consumption — I once visited a Gentle- -woman, who was very much troubled with the headach, and was never relieved from it, 'till she removed a large Cushion from her head — Cloathing in Dress, not suited to the weather — How many Coughs are produced for want of Clothing, the lower parts of women — Women should wear Flannel Drawers — Linen is said to be less wholesome, worn next the Skin, than Flannel — The Roman Army wore Flannel, & were by that means more healthy — 12th — Dancing — Heat, Cold, Dryness, Moisture, Excessive quantities of water, & a Dry Atmosphere, are all Causes, which predispose to Diseases —

Food to be healthy, should be made up of a mixture of Animal & Vegetable — Tea and Coffee, when Strong, affect particularly the Nervous System — Certain Condiments as Pickels, and Salt, taken in large quantities, produce Indirect Debility at Dyspepsia — excessive quantities of Spices, produce Diseases of the Stomach, Acids produce the Cholic, and Drinks taken in large quantities, and of a bad quality, as Sour Wines produce the Gout — Wine is the Parent of the Gout — Spiritous Liquors which are so destructive to Mankind enter into the Body, like the Evil Spirit, into the Swine, at the head of a Precipice, and produce Devastation, & various Disorders — it produces Sickness at the stomach, Bloting — Sore Legs, Burning of the Palms of the hands & Feet, Dropsy, Epilepsy, Apoplexy, Palsy — Gout &c — — —

Drinks, particularly taken in the Morning, and at the time of Eating are hurtfull - by dissolving the Food, & causing it to pass too soon out of the Body, & thereby hindering the elaboration of all the Nutritious parts - Therefore those who Drink a great deal, during Meals, become very soon hungry again. Drinking Health - when we are Eating is a very pernicious, & bad Custom - It has been doubted whether Spiritous Liquors are best drank, before a Meal or after - however it is evident, that when Strong Beer, or any Spiritous Liquor is drank before Meal - a preternatural Appetite is caused by its Stimulus on the Stomach; & therefore this appetite, by prompting us to take in a large Quantity of Animal Food, will make it very dangerous; on account of the excess of Stimulating Powers, & the tendency to Indirect Debility -

The State of the Air; as its Sensible, and Insensible Qualities, is a Fertile Source of Diseases - The Sensible qualities of the Air,

are Heat, Cold, Moisture and Dryness—
By the Insensible we mean Miasmata, and
Contagion— Heat is the Grand Agent,
in Nature, it actuates the Principle, of
Life in Animals & Vegetables; and forms
the Elements, it is a positive quality,
and derived from the Sun — 62d of heat
stimulates the Body, in Middle Age.
In Old Age it requires 70 or 75d to be equally
Comfortable — The reason why Old People,
think the Winter colder, now; than formerly
is because they have a deficiency of that
stimulus, & Heat, which they possessed
when Young; see Note, on Heat &c.

Cold is a negative Quality, & caused
by the Absence of Heat — It is a Sedative,
and diminishes the Size, of hollow Vessels —
and acts by destroying the Excitement,
of the System — The invigoration which
we feel, when a cool Day, succeeds a Hot
Day in Summer, is said to be owing, to

the Stimulant Power, of the Cold, Bracing up the Body, -- To this I answer No — For when the Excitement is raised to a high Degree, by the heat of the Day, and Coolness in the Air succeeds that, it only acts upon the Body in that State; by diminishing the Excitement, and thereby taking off the Indirect Debility & Languor which attend Summer heats —

Moisture is the frequent Source of Diseases — Dryness of the Atmosphere, is unfavourable to Asthma, Cough, Consumption &c — Febrile Diseases, are produced chiefly by Miasmata — The Action of alternate heat and Cold, produces many Disorders — which dis= =covery, marks an Illustrious Æra in the history of Medicine — and for which we are indebted to the Ingenious Dr Broown

Lecture 4th —

We shall proceed to innumerate, the Remote and Predisposing Causes of Diseases —

Different States of the Mind produce Disorders—
either from an excessive, or deficient Action of it
Thinking is a Stimulus, but when protracted
too long, or when indulged too intensely pro=
=duces Indirect Debility, which shews itself,
first in the Stomach in Dyspepsia, & afterwards
in Universal Affections of the Nervous System.
Particular Passions as, Joy, & Mirth, from their
Irregular Actions, are a fruitfull Source of
Diseases, they act by inducing Direct, or Indi=
=rect Debility. — Fatigue always follows the
latter, & Low Spirits generally the first — —
Grief, Fear, Sense of Shame, and Guilt, have=
=ing nothing positive in their Action —
they act as Sedatives — their Action is generally
gradual, but sometimes Sudden, so as to
bring on Death — (A woman in this City
Died from the Sight of a Physician)
Debt is frequently the Cause of many Diseases.

There are Certain Amusements which
predispose to Diseases, such as Hunting,
Gaming &c — I knew a Case of Hemoptisis
from Hunting. — Certain Literary Pursuits,
where the Understanding is very much Ex=
=ercised produce Diseases, depending upon,

Indirect Debility — The venereal Appetite causes Destructive Ravages among Mankind — Certain Adventitious Diseases are brought on by the Use of Tobacco; This Substance is truly Stimulating, & is Analogous to Spt.s Liquors, and Opium — By its excessive Stimulating Power it causes Indirect Debility — — —

Mans Appetite, for it is not Natural, but entirely Artificial — Its effects upon the human body are various — It injures Digestion, by wasting that quantity of Saliva, which so necessary for it; & Destroys the Tone of the Stomach — producing Dyspepsia — It injures the Taste, by destroying its natural Properties. — It acts directly on the Nervous System, in producing Nervous Disorders — Headach, — Apoplexy, Epilepsy, Palsy, &c. are produced, sometimes by an Excessive use of Tobacco — It impairs the Memory, and causes Tremors of the Extremeties — The Case of Sr. John Pringle is a fact, in favour of this, he used to take a great quantity of Snuff during the Day,

and became thereby subject to frequent Tromas, by observing several Die of Apoplexy, who made use of it: he left it off which restored him again to a good State of Health - and what was very surprizing this Gentlemans Memory was much impaired, by using Snuff, but after discontinuing the practice was totally restored — Tobacco is necessary as a Medicine — It is made use of after Meals, sometimes to compose the Stomach, and assist Digestion — but instead of this it is the Cause of Indigestion; by wasting the Saliva, — it is used sometimes to assist, the Intellectual Operations by its Stimulus, its seems more probable that it supplies the want of Ideas — There are certain Classes of Men, who use a large Quantity of it. Fear, and Danger, create a desire for Tobacco, particularly among Soldiers, and Sailors. the latter in wet weather, — The Physical effects of Tobacco, are injurious, to the Mouth, Teeth, Lips &c — There are particular modes of using Tobacco (viz) Snuffing, Chewing, and Smoaking; — Chewing, & Smoaking appear from their effects, to be the most injurious — Smoaking

through a long Pipe, is less injurious than that of Segars — on account of the Smoke from the Segar, being admitted into the Mouth, in a much more heated, and Acrimonious State than from a long pipe, the consequences arising from it are, the loosening of the Teeth, and Corroding of the Gums; the Acrid humour which arises with the Smoke, Stimulates the adjacent parts, & Causes Thirst, that cannot be allayed by water — Snuffing impairs the Voice; & the general effects of Tobacco - in creating thirst, and producing a Love for Spiritous Drinks — It has an influence upon the Morals & Manners of the People, because, 1 - The use of Tobacco militates against good Manners — 2 - The Use of Tobacco is not connected with Cleanliness - 3 — It disposes to Idleness — Custom frequently blends things of an Opposite Nature — Christianity ought to declaim loudly against Yet Christians. Chew, Smoke and Snuff. If a Man takes a Pinch of Snuff every twenty Minutes, he will in Thirty Years.

lose, Forty two Days, five hours, & some odd Seconds — Poison seems to be a relative Term, to this — If we attend to what Travellers say, we shall find it is the Food of an Ugly Beast, in the Desarts of Africa, called the Rock Goat; — We find that Insects, Cows, Sheep, Goats, &c all avoid it, and may the Students of the Colledge of Philad^a not only be distinguished for their Abilities in Medicine; but for their Abhorrence of Rum, and Tobacco —

The too frequent use of Opium, is a Cause of Disease — the daily experience of the Turks prove by its frequent use; a Cause of many Disorders, such as Tremors, & Diseases of the like kind — By its long use, it brings on General Debility — Sallow Complexion, premature Old Age, and at length Death, ensues — Night Air, Commerce, Abstinence, War &c — are fruitfull Sources of Diseases —

Lecture 5th —

Diseases, are necessary for human Happiness, as — 1 — They excite us to the

Study of Anatomy; and Natural History - from which we acquire new insight into the powers of our Creator, and New reasons for Adoring his Goodness - -

2d - They Stir us up, to an Enquiry, into the operations of Nature, in the Animal, Vegetable, & Mineral Kingdoms -

3d - By giving rise to a Spirit of Enquiry they Cultivate, & Invigorate the Powers of the Mind -

4th - They alone create that Charity which endureth Forever; & which has established Hospitals, & Alms Houses, & Dispensaries, those Altars of Benevolence -

5th - Without them, Health would be insipid - As the painfull Heats of Summer, and Colds of Winter are necessary to render the Temperature of Spring delightfull; as Darkness gives Charms to Light - As Deformity renders Beauty Captivating - As Evil is necessary to lead us to Good - and as Error serves only to enhance the Love, & Charms of Truth - So in like manner Diseases are necessary by way of Contrast to impart a relish for Health -

6th — They render more easy the passage, from Life, into Death — and less Terible and distressing to Survivors — —

7th — They improve the disposition of Man to virtue & thence promote human Happiness — Hence we see. 1 — The Dignity of our Profession — 2 — We are led to look up and Admire the Supreme Director, of Events in all things — being Confidant that — "All partial Evils, universal Good, all Discord Harmony not understood"

— Pope —

Practice of Physic —

The Practice of Physic teaches us the causes of Diseases, & Cure —

A Disease is that condition of the Body, in which the Functions are performed with Difficulty, or not at all. — —

The causes of Diseases are divided into, 1 — The Remote. } 3 — Occasional or exciting
2 — Predisposing } 4th Proximate Causes

A Symtom, is an Apparent Deviation from the Natural State of Health — Symtoms are divided into three Kinds,

(viz) Symtoms of the Disease, Symtoms of the Cause, and Symtoms of Symtoms - - -

The Symtoms of the Disease arise from the Remote Cause - the Symtoms of the Cause from the Predisposing - the Symtoms of Symtoms from the Occasional, and Predisposing Causes - - -

In Pleurisy, Pain, Fever, and Cough, are Symtoms of the Disease - - - -

Coryza, or Angina is a Symtom of a Cause - Difficult Respiration, caused by Pain, is a Symtom of Symtoms - - -

The Animal Functions are, Sensation, and Intellectual Operations &c - -

The Vital Functions are Respiration, Circulation &c - -

The Natural Functions are Digestion, Chylification, Nutrition, and Secretion -

The Diagnosis, is the distinction of Diseases from each other by taking all the Symtoms collectively - -

Prognosis, is the declaration of the Issue of a Disorder from the State of the Symtoms, Diseases, are divided into Idiopathic.

and Symtomatic - - - the Angina is Ideo=
=pathic & the Globus Histericus. Symtomatic
of Histeria - - - -

Diseases are also Natural, & Artificial. - Fevers come under the head of Natural Diseases, & the Diseases of Indians - - In Dr - Sydenhams time, of Natural diseases; these were $\frac{66,000}{100,000}$ of = the remaining 34,000 - were Artificial - - at present there are only 10, 000 - Natural Diseases as Fevers - Inflam^n - and the other 90, 000, Artificial; hence Physicians have doubled the veracity of Sydenham - - Artificial Diseases are the Offspring of Luxury - and the peculiar modes of Civilization - - - the Nervoses are all Artificial -

The principle Indication of Cure, is founded upon an Accurate knowledge of the Proximate Cause, - - - Diseases are Cured by Natural, and Artificial Remedies - -

The Natural Remedies, are the Powers, and operations of Nature - - The Artificial Remedies are taken from the Materia Medica Diseases are General, & Local, from their affecting the whole System, or a part of it - - Fever is a General Disease - - Cancer is a Local & General Disease - Schirrus is a Local Disease, - - Opthalmia - -

and Phlegmon, are first Local, & then General—

The only Outlets of our Existence, are Old Age, Casualties, War, and Fever. ——

In the following Lectures I shall treat of. 1.. Fevers — 2 — Hemorrhages — 3 — Exanthemata — 4th — Profluvia — 5 — Nervous Diseases .. 6 — Diseases from the Effusion of Air, and Water — 7th — Diseases which affect the External parts of the Body — to which I shall add the Diseases of Women, Children, and Old People & Negroes — and the Diseases of the Old & New Testament ——

Of Fevers.—

The Characteristics of a Fever are, a frequent Pulse, coming on after some Degree of Cold Shivering — considerable Heat: many of the Functions injured — the Strength of the Limbs especially diminished ——

I shall begin with the Proximate Cause of Fevers — I object to Morbific Matter, as being the Proximate Cause of Fevers, because 1 — Fevers are produced from Causes which cannot be supposed to enter the Blood, as Fear — 2 — Fevers are cured by Electricity Lightning

There is but one kind of continued fever, viz, Typhus

3d — Fevers are Cured without Evacuations, as by the Bark. — 4th In Fevers, no Acrimony is perceived in the Sweat, or Urine — 5th — The Sweats & Sediment in the Urine are the effects; not the Cause — 6th Effluvia are the Remote Causes; not the Proximate — Abcesses have been urged, as a proof of Morbific Matter in Fevers, but they are only the Consequences; not the Cause of Fever, they are produced from the diminished Action, on the Extreme vessels they occur in Mania — hence they cannot arise from Lentor, in a Disease; which does not arise from Contagion —

In the following Lectures, I shall deliver my own Theory of Diseases; & here I lay it down as a Simple proposition — that all Diseases, depend upon predisposing Debility; except Poisons, Wounds &c —

The predisposing Causes of all Fevers is Debility The Occasional Causes are Cold, Moisture Fear, Intemperance and Fatigue — all these produce Debility — & that in proportion, to the predisposition, to Disease, Habit, Climate &c

All general Diseases depend upon the same predisposing Debility — Inflamatory Diseases depend — 1 - On the Stimulus of Heat — 2 - On External violence — 3 - On the Mechanical and Chimical action of extraneous Substances - 4th - On the increas'd impetus of the Blood — 5th - On Cold in a degree not equal to the production of Gangrene — that Cold is debilitating may be proved, by attending to the Similarity of the effects of Heat, and Cold on the human Body — 1 — Thus the Inhabitants of the west Indies, & the North, exhibit Similar Diseases of Debility — —

2 - The Sunny rages in both Countries —

3 - Actual Experiment confirms the Truth of this Doctrine — This refers to the Experiment of Dr Browns, two Students — One of them immers'd himself in Snow — the Symtoms of Debility followed on 'till the Pulse could no longer be felt — The same happened to another who placed himself in the same manner, in ~~Snow~~ Cold water — — —

Lecture 6th —

The Proximate Cause of all Fevers, is — —

That Spasm is not the proximate cause, is inferred - from ~~its contineuing~~ fever's continuing after the Spasm of the extreme Vessells, as

an Irregular Action, in the Arterial System, from a deficiency, or excess of Action of the Moving or Vital Powers — This irregular action of the Arterial System, is a Convulsion of the Muscular Fibres of those Vessels which constitute them —

This Doctrine may receive some additional Strength, from the consideration, of the following particulars

I — Convulsions are preceded by Debility —
So are Fevers —

II — In Convulsions there is a jerking of the Arterial System — perceived by the Fingers — —
So there is in Fevers — —

III From the Analogy between Fevers, and Convulsions, of the Nervous System — as

1 — Previous Debility takes place in Convulsions,
So in Fevers —

2 — Tremors precede Convulsions —
So they do in Fevers —

3 — There is in Convulsions, a Coldness of the Extremities — observeable — So there is in Fevers —

4th — Convulsions, ~~with~~ are attended with excess of Irregular Action — or defect of Regular Action, of the Arteries — So are Fevers —

5th — Convulsions, return at Regular, & Irregular periods — So do Fevers — — — — — — —

Frequently appears by copious Sweating, is relieved

6th Convulsions impair the Functions of the Brain — So do Fevers —

7th Convulsions are attended with alternate Action & Remission — So are Fevers —

8th In Convulsions of the Nervous System, there are intermediate Degrees of Action They appear in Epilepsy & Hysteria So there are in Fevers — —

From a review of all these Considerations, the Proximate Cause of all Fevers, appears, to be an Irregular Action, in the Arterial System, from excess, or defect of Action, in the moving powers —

We come next to speak of the,

Exciting Causes —

These are direct, or indirect Stimuli — The indirect Stimulants are the abstraction of the Direct — Excitement, & Excitability are sometimes converted into each other — for instance / In Drowning there is a total abstraction of Excitement, and the greatest accumulation of Excitability — In Tonic Madness, Excitability is almost entirely converted into Excitement / May not matter in the Extremeties excite a Fever — —

That Principle in the System, which resists Disease, appears to be a blind principle,

and to arise merely from the Constitution of the Body; & may be called a Vis Motrix Naturæ —

Heat is the principle exciting ~~power~~ Cause of Inflammatory Fevers —— as — ~~the Winters Fevers~~ 1st — They are unknown, in Countries, which are uniformly Cold, & Warm —— as the Winter Fevers of Russia, and Sweden — are rather of the Sektic Kind —

2d — They generally appear in the Spring, and Fall, after Changes, in Temperatures of the Air —

3d — Pleurisies generally attack People in the Night, after getting into a warm Bed —

4th — In Intermittents the application of heat frequently gives this Fever, an Inflamatory turn — hence we often see Patients, who enter our Hospitals, with Fevers purely Intermittent, from the warmth of the Room in which Stoves are kept — have them put on, an Inflammatory appearance ——

5th —

6th — Cold increases the appetite — which disposes us to take in too great a quantity of nourishing food — which creates a fullness, in the System, & this is an exciting Cause of Inflammatory fevers ——

A Horse will eat more, in a Cold, than a Warm Stable — hence the Custom of the Germans, of Building their Stables, next to their Dwelling Houses. — —

From the operation of all these Causes, the Vessels become more tense, & perhaps more Dense — and are filled with a greater quantity of Blood — The persons most liable to Inflammatory Diseases are — the Young Laborious People & those who use violent Exercise, as Seating &c — they are most common in the Country — Sometimes they arise from Direct Debility, as in the City, after a long term of Cold weather — They are almost unknown in High Life, The Manners of the Luxurious dispose them rather to Diseases of the Nervous kind —

There are Inflammations without Action, these are the Internal & arise from want of Excitability. (Note, here a passage from Dr Quin was read, giving an Account of the Dry Belly Ach, and its Method of Cure) — —

The Symtoms of this irregular Action in the Arterial System are, pains of the Head — Dry Skin, partial Sweats, Pulse hard, full, & working, Dry and White Tongue, Vomiting, Thirst, Costiveness

and high colored Urine, Tremors & Coldness of the Extremeties; peculiar to Convulsions & Fevers—

The Chilly Fit, & Spasm, are not parts of the Fever, and are only accidental Concomitants of Debility — they are Symtoms of an approaching Fever, and depend upon a recess of Blood from the Capillary vessels Arteries, into the internal parts — the vessels on the extreme parts by that means contracting thro, a kind of Mechanical Necessity — From whence is the excess of Irregular Action, in Inflammatory Fevers, succeeding Debility — Why is not the Convulsion in the Arterial System proportioned to the Exciting Powers — a Calm at Sea, which is owing to Debility in the winds — frequently precedes violent Storms — here there is no proportion between the Cause, and the Motion produced — A single Castor Oil Nut, tho thrown up by vomiting, will produce a Disease, which will last for many Weeks — and a Grain of Sand, introduced into the Eye, will produce wonderfull effects, which are not proportioned to its Cause —

It may seem strange, that such violent effects, should proceed from such trifling causes — But to understand this, we must turn our attention to the Operations of Nature in other parts of the System — In the Natural — Moral and Political worlds — we shall there, every where see the same proportion between the Cause, and Effect — Nature is one — For we observe in the Political Bodies, an imprudent word, proceeding from a persons Mouth, may be the Cause of a Revolution in a State —

Lecture, 7th —

We next enquire into other Fevers; as the Synochus — which happens in Remitting Fevers, accompanied with Excess of Action in the begining, but Defect towards the End — In Intermittent Fevers, there is Irregular Action — In the Typhus Mitior, there is a little excess of Irregular Action, but great defect of Regular — In the Typhus Gravior, Persons sometimes fall down, Dead upon the first attack — The Absence of a Chills, indicates the utmost Debility,

and the most passive State of the Vis Motrix.

We shall now return to the Cure of Inflammatory Fevers — The indication of Cure, in Inflamatory Fevers, must be taken —

1 — From a knowledge of the predisposing and Remote Causes — steady regard being had to the Season, and previous Epidemic — Scarlatina, partakes of this Inflammatory Diathesis, which is very necessary to attend to —

2d — From the Symtoms of Inflammation attending the Disease; as great Topical pain Costiveness &c —

3d — From a knowledge of the Age, and Constitution of the Patient — as the Young Athletic, & Laborious, are most subject to them —

4th — From a knowledge of the Patients previous habits, with respect to Disease — Pleurisies are apt to become habitual — a Person died of the 45th Fit of Pleurisy, and there is a person in this City, who has had 24 attacks of it —

5th — By attending to the Country; or Late place of Residence of the Patient —

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an American in London; will bear a loss of more Blood, than a Citizen in London — A Case of an American Gentleman, in London attended by Dr Fothergill. & being Bled too Sparingly, in consequence had an Abcess formed, which broke Inwardly and Outwardly — probably if he had been Bled more freely, it would have prevented the formation of the Abcess — he recovered his Health only by travelling three Years, in the South of Carolina ——

Dr Hillary suggests the importance of attending to this — he says those in the South, will not bear Bleeding so well as those from the North — he observes that in the west Indies, Asthma and Swelled Legs, succeed Intermittents — 6th — From the Pulse which is hard, jerking, and full, without much quickness, being seldom higher than an 100 ——

We shall now give some Directions with respect to the pulse — 1 — The Pulse should be felt, with the Fingers, not the Thumb —— It should be felt with the same hand; which shou-be the Right — by that means you may obtain a better knowledge of the pulse, by habituating yourselves to one hand only —

2 – The Pulse is Slowest when we lie on our Backs quicker on the Side – and quickest, when we Sit up, or Stand by the Fire – 3 – It is Slower in Sleep, than at any other time, and rendered always quicker, by a full Meal 4th – Passions of the Mind influence the Pulse, as Hope, Fear, Anger, Joy &c – Hope, by its Stimulating power, increases it; and Fear by its Debilitating power, diminishes its Action, 5th – Different positions of the Arm influence the pulse, 'tis best felt when the Arm is in a State of Pronation – reshest should be had that no pressure be upon the Arm, when the pulse is felt – 6th – The State of Sensation in a Physician being Different, in different postures: he ought therefore to feel the Pulse in the same position of Body – Sitting, is the best position – Shutting the Eyes, and remaining in Silence, whilst the Pulse is examined, is of great Advantage, for by the quiescence, of one or more of the Senses, the sense of Feeling, is more Concentrated, & by that means, we can judge better, 7th – It is quicker in Infancy, than Old Age, In Old people, it is apt to Stop, and is scarcely

quickened by Inflammatory Fevers —
Morgagni, says it becomes more Regular
in Diseases, in Old People, — In Fevers, it will
become fuller, but scarcely quicker — the
Slowness arises from the want of Excitability —
&c — The pulse should be felt in both Arms,
because the Artery sometimes runs on the
Ulna, & sometimes on the back of the hand,
and Radius — lastly allowance ought to
be made for exposure of the Arm, to Cold,
and heat, for the Stimulating Properties
of heat, and the Sedative Effects of Cold,
make a material Difference in the State
of the pulse, — the pulse may be stronger, in
one Arm, than the other — The Pulse is the
Dial Plate, of Sickness — Habit will produce
a great knowledge of it — I conceive more
is to be known, respecting a Disease, from the
pulse, than probably any one other Symton —
Hyppocrates, Galen, and Celsus first excited
the attention of Physicians to it — It is
Surprizing, Dr Brown neglects the State
of the Pulse — Hardness, and and Soundness
of the pulse, are of more Consequence,

and more to be attended to than quickness, The pulse should not be felt immediately after recommending Bleeding - I have known the Pulse, which before was very full & hard; become low, and scarce perceptable as the following instance will Illustrate I was called to a Lady, labouring under an acute Hepatitis, with a full and hard pulse; but upon advising Bleeding, her countenance became pale, her pulse scarcely perceptible, - She was violently agitated, and the trace of a vein, could not be seen upon enquiring into the cause of her apparent distress, She informed, that she never had been bled; and had a dread of that Operation, Notwithstanding my endeavours to reconcile it to her - She obstinately refused to submit - the consequence of which was, that her Liver, Suppurated, and She finally Languished, and Died, of that disagreeable and Distressing Disease - - - -

Lecture 8th

The Links, or Chain of Causes of Fevers are 4, as

1 - ~~Predisposing debility~~, a weak Excitement - from

1 Remote Cause which is part effluvia

42 2d. Predisposing cause or debility ~~Irregular Excitemen~~
~~2 Increased Excitability~~ ~~Morbid Action~~ or
3d. Stimulating powers, especially Heat,
4th. Irregular Action, of the Arterial System —

Are there any means of preventing Diseases when they make their approach? Yes —
Are there any means of predicting them, Yes, as — A disrelish for Tobacco when accustomed to it — Burning in the palms of the hands usher in the Consumption — Frightfull Dreams precede the Hydrocephalus — Small Stools, precede the Dysentary — A Sickness of the Stomach & Coldness of the extremeties, precede the Gout — Lightness of the head, and false vision precede the Piles — Pain in the Back, and Loins, go before Menorrhagia —

The promonitory Symtoms of Inflamatory Fever, are — 1st Costiveness — 2d a Sense of weariness, — 3d Dulness of the Faculties — 4th Preternatural Appetite, or a defect of it, 5th Pain in the Limbs — All these Symtoms, plainly indicate Debility in the System — which is proved by certain Stimuli preventing their further progress —

Are there any means of preventing, Inflammatory Fevers, when the above Symtoms

warn us of its approach? Yes - - - -
1- By Rest - 2d By fasting from grofs, and
Nourishing Aliment - 3 - By direct Stimuli
and Cordial Drinks - these must be only
used in a forming State of the Fever - after
Irregular Action has taken place, these
preventatives are improper - By drin=
=king a pint of wine whey - Soaking my
Feet &c - in a forming State of an Inflam=
=matory Fever - I have been able to strangle it.
4th Perhaps Opium would remove this Dis=
=order in its Birth - by its Stimulating
powers, taking off the Debility in the System -
here the Stimulus, should be Accomodated
to the degree of Debility in the Body - -
5th - And lastly - drinking warm herb Teas,
Bathing the Feet in warm water, and
making use of Hartshorn -
The Remedies are, Natural, or Artificial,
the 1st - have been much magnified, by the
followers of Hypocrates - The powers of Nature
are not to be depended upon - I would
resolve her operations, into Physical Neces=sity
Nature often destroys Life, if left to herself -
in Fevers, by excefs, or deficiency of Action.

The same Idea, may be extended to Apoplexy &c— She often sends pain, which is not proportioned to the Danger — I beleive that the Operations of Nature, are as truly Mechanical; as the Laws of Gravitation — Electricity — Magnetism, and I think we could show, as much Soul, or Inteligence to exist in Fire, Air, or water, as in the Operations of Nature — —

The general Indication of Cure in Inflammatory Fevers, is — To diminish Excess, of Irregular Action — a Morbid Excitement, in the Arterial System, — This is done — 1st by Bloodletting, the following remarks, on Bloodletting are proper — 1 — The Blood should be drawn from a large Orrifice — Sydenham, observed that more releif was obtained, when Bloodletting was performed in an Horizontal posture — 2d — The Blood should always be drawn from the Arm — because we derive more advantage from it, than from the Foot — when it is drawn from the feet, it is permitted to flow in water, and we may by that means be deceived; with respect to the quantity taken — There is no reason, that should prompt us, to Bleed women in the Feet — Derivation & Revulsion are Doctrines,

long exploded ——— What Circumstance should determine the quantity of Blood to be drawn? — The Relief obtained, the Pulse & the appearance of the Blood, — What is the proper quantity to be let? — Cleghorn used to take 20 ℥ — I have followed Sydenhams method to Bleed moderately & Repeatedly from 10 to 12 ℥, and administer Purges, on the Days I do not Bleed — as Crem. Tart. Sal. Glaub. Glysters of warm water &c ———

To what quantity may Blood be drawn? — It is Supposed a middle Sized Man has 30 ℔ of Blood in his System — From 60 to 80 and an 100 ℥, have been taken away with Advantage — and in the Case, of an Officer, wounded at the Battle of Prince Town, by a Ball thro' the Lungs, I took an 120 ℥, and he had lost about 200 ℥ on the Field before — who recovered, and is in Good Health at present —

Is Bleeding proper in all ~~Cases~~ Ages? — Yes — Old People, & likewise Children, bear Bloodletting well. — Dr. Brown says that Children, have only, Diseases of Direct Debility — But I do not agree with him, in that respect — The excess of irregular Action is less in Children, from their being less exposed, to the Causes, productive of the Disease ———

Children have more Excitability than Old persons - but it soon exhausted - Pleurisy, may be known in a Child, by its Crying when pressed on the Side - the pain being thereby increased -

Is Bleeding proper at all times in Women? - Yes - It is proper, even at the Time of Menstruation for the System, is then in a more Excited State, It is likewise proper in Pregnancy; for in that State, the System is more disposed to an Inflammatory Diathesis - It has the Authority of Dr. Sydenham to recommend it -

II Remedy - is the application of Cool Air; there is no general Rule for its Application - it lessens Excitement, and of course diminishes irregular action - the degree ought to be proportioned to the excitement of the System I would forbid it, in Pneumonia, and Measles; when Debility attends - It appears to be, only a proper remedy, where pure Inflammatory Diathesis prevails - connected with Cool Air, Sitting up in a Chair is useful -

1 - It delivers the Body from the Stimulus of its own heat - 2 - More Cool Air is by that means applied -

3 — Riding and walking are too Stimula-
:ting, but sitting up is usefull, by the
action of the Muscles producing a gentle
Stimulus, and thereby wearing down the
Excitement —

III, Remedy is Emetics — vomiting lessens
excess of Action, and determines to the Sur-
:face of the Body, Tartar Emetic is to be pre-
:ferred to any other Antimonial preparation,
Tartar Emetic in small doses, to the amount
of 1/6 part of a grain, taken every hour, mixed
with Sal. Glaub. is excellent to determine
to the Surface of the Body — The Seneka
Snake root; is a kind of Vegetable Tart. Emet,
it excites Nausea & Sweating — it Sweats
without Stimulating, which makes it an
excellent Remedy — It was first introduced
into Virginia — —

IV, Neutral Salts, Nitre is one of the best,
Vit. Tart. Sal. Glaub. and Shts Minder.
this last is the weakest —

V, By avoiding all Stimulating powers,
as, 1 — The Stimulus of Thinking: Business
of all kinds must be omitted; no Company
should be admitted into the Room — —

News of every kind should be kept from the patient, and a Loquacious Nurse is always to be avoided — 2d — The Stimulus of Light — 3d — The Stimulus of Noise — — — 4th — The Stimulus of Animal, & other Food — of a Stimulating Nature should be abs- :tracted — The Diet should consist of Salep, Sago, Panada, weak Broths — these are to be used according to the State of the Disease, Panada is as good as any — 5th — The Stimulus of thirst — this is to be obviated, by Dilnent Drinks — the drinks ought to be those which are agreeable; and not of a Stimulating quality, Mak Teas, as Sage, and Balm — Barley water, & Drinks of Acid Jellies — weak Punch — Dried Cherry water, made by pouring Boiling water upon the Cherries — Raw Apples sliced, & Boiling water poured on them, make a very Agree- :able Drink — Tamaind, and Toast & water, Should the Drinks, be always Cold, or warm — they should neither Cold, nor warm; but in a State between both, — The temperature of Drinks ought to be proportioned to the Feelings of the Patient. — — — ———

In Diseases of excess of action, Cold water, taken into the Stomach; has the effect of determining to the Surface of the Body—

When we are in Doubt, whether the Inflammatory Diatheris, is in a pure, and unmixed State, we should give Drinks moderately warm—— In Inflammatory affections of the Lungs, after a few days, Cold Drinks, are injurious——Are Sudorifics proper? No they injure, in Inflammatory Diseases— Are Blisters proper in this Disease?—They are improper in the Begining, but may be used with Advantage in the close of the Disease—except in Local determinations;

Is warm Bathing proper?— It is only proper before the Fever, is formed, but injures after the formation of it—

Is Opium proper?— No,

Is Mercury proper?— It may be so, under certain Restrictions— Mercury has a two fold Operation;—1—As a General evacuant,—2—As a diffusible Stimulant, The first of these acts only on the Alimentary Canal; & is given in large Doses—

The second acts on the Lymphatic and Arterial System; and is given in small doses - In this Disease, Mercury then, is only to be given as a purge; and should be exhibited in large doses; for when given in small doses it Acts on the Arterial System, producing Inflammatory Diathesis. All inflammations tend to Resolution, Suppuration, a Gangrene - the Cure of Inflammatory Diseases, depend upon, Resolution, - Are the passions usefull in Inflammatory Diseases? - One Fact of them I will mention in the next Lecture - The Indians of this Country, Cure a Pleurisy; by Suspending themselves, to a limb of a Tree; by the Arm. - here the Excitability is by that means Accumulated -

Lecture. 9th

We shall now proceed to consider the Remote, and Predisposing, Causes of Fevers: with excess of irregular. & deficiency of Regular Action, not depending upon Cold - - the Air acts by its Sensible & Insensible Qualities - 1. Marsh Effluvia -

2d— Human Effluvia, —3d— Cold— —
4th— Excess of Heat, —5th— Fear. —6th— Grief,
7th— Certain Specific Contagions— —
8th— Certain Stimuli, applied to the Stomach and Bowels—

I. Marsh Effluvia— this is produced by Heat, and Moisture— hence they occur only in the Fall— Moisture is necessary, as well as Heat, to produce effluvia, hence Inundations from Great Rivers, joined with very dry Summers, are favourable to Intermittents Fevers. . . . This Effluvia was supposed to be of an Animal Nature— but Experiments, prove it to be of a vegetable Nature— for Diseases are not more common, near Grave Yards than other places— — —
Mr. Howard, says in Marseilles, the Bodies after dying of the Plague, have been handled without injury— — — This Effluvia rises chiefly near Rivers; were their Ascent is not prevented by Trees— It follows cutting down the Trees— hence Countries become liable to Diseases, when they are Clearing, and disappear in proportion as Cultivation is advanced— It is a singular Fact that a quick succession, and mixture of different Airs,

will produce Disease, when either alone would not, — thus a Person going from an impure to a pure Air, will be affected, — as in a Sick room, or Hospital, — when he has been exposed to a number of Contagions: & inhaling a number of Noxious Effluvia; will feel no inconvenience from it while there — but will very often be attacked, with a Vomiting and Fever, whenever he returns to the fresh Air, — This occurred to me several times during the Late war, in the Military Hospitals —

The Citizens are frequently taken Sick if they stay in the Country till the Effluvia arises — Old people frequently die, when removed from Agueish Countries; for the Stimulus of the Contagion in them produces healthy Excitement — a man in the habit of drinking, may take one Pint of Wine without injury — while the same quantity on another unaccustomed to it, would produce Indirect Debility — A Mixture of Different kinds of Breath, and Perspiration; is often the Cause of Fever; and that of the Putrid kind as an instance of this. Dr. Hales relates, that he knew four Young Men being Seized,

with a putrid Fever, three of whom Died, from only applying their Ears occasionally to a hole in the Floor, of an upper Room, which served to ventilate the place; where the House of Commons sat, and whose Debates they were employed to take down, which they heard by occasionally applying their Ears to the hole,— We frequently find a Nausea occasioned by being in a Room, which is full of the Breaths of different persons, and Noxious Smells— A mixture of Sea, and Land Air is prejudicial to some persons. this I was made certain of by a Sea Captn with whom I crossed the Atlantic, he informed me that at a certain time; he knew when he was nigh Land, altho no Bottom could be felt, by the Lead, & from this circumstance (viz) his Catching Cold, which he told me happened to him, whenever he came to the Line, where the Sea & Land, Air Joined— Dr Percival informs us too, that when he was at Scarborough, where he went for the benefit of the Sea Air, for a Consumptive Complaint, he got much worse by walking every Day, along the Sea Shore— but when he ascended

to a neighbouring high Hill. where he was above the current of land Air — he received that of the Sea in its pure State; got much Better — What is the nature of Marsh Effluvia. Some facts would seem to prove, that its Bad effects, are owing to insects — But it seems very probable, that it the putrefaction of Animal, but of Vegetable Substances, which is the Cause of the Bad effects of Miasmata — for Mr. Howard, remarks, that at Smyrna, the Number of those, who Died, were so great, that they could not all be Buried for some Days — the consequence of which was, that they putrified — the Stench of whose Bodies, passed several times thro' the Governors house without any of his Family, being affected with it. and it is also remarkable that Fevers are not so prevalent, about Slaughter houses, as about Ponds — —

II. Human Effluvia. — Mortifying, as it may be to the human pride, it is nevertheless true that we engender Diseases, within our own Bod the Diseases arising from this Cause, is pro= -duced in various ways — — —

1st — It is produced from want of Cleanliness, perhaps Linen favours the production of it

more than Woolen — 2d It is produced from confinement; especially in a Crowd — this is supposed to produce the Plague, in Egypt, at the flowing of the Nile — It is said that the plague arises in this way, almost every Year in Constantinople, where the people crowd together, to enjoy the Luxury of the hot Rooms &c — It was the cause of the mortality in the Military Hospitals — It sometimes produces Fatal effects in Schools — It is produced from, low vegetable Diet; or scanty Animal Food, — 4th From depression of Mind — can a human Body infect itself, from Effluvia generated in it? — Yes it can — The fluids stagnating in the Extreme vessels and becomeing acrid, may produce a Direct Stimulant to the Body — the Jail Fever, is so frequently produced —

III. Cold, is a universal predisposing Cause of Fever, by its debilitating power, rendering the Miasmata more effectual in producing their action — the circumstances according to Dr Cullen rendering it active are, 1st Its Intensity — 2d Its Duration, 3d Its Combination with Moisture — 4th Its being accompanied with a Current of Air —

5th Its alternation with heat—
6th—Weakness of the Body—
7th—Depriving the Body of its usual Heat—
8th— The Body being exposed to Heat & Cold, can Cold produce Fever, without the Concurrence of Effluvia?— Yes—there are Fevers from Cold, without any Exhalation—as the Intermittents which appear in the Spring, arise from Cold, and not from Marsh Miasmata,

IV. Heat. The excess of this produces Fever, by causing Indirect Debility———

V. Fear, is another Cause producing Fever, by causing Direct Debility— The Plague it is observed always Seize, most; when it first appears in a place— Because when the Disease has prevailed for some time—People loose in some degree that fear; which it first excited— hence Physicians & Nurses, escape it generally—because from their Occupation, they are forced to divest themselves, of that fear of the Disease; which it first excited in others—— The Fever produced by it, is frequently attended, with Chilly fits, heat, and thirst; Called the Cannon Fever—

VI—Grief, is a strong, predisposing Cause,

to Fevers. Can it alone produce Fever? Yes- the fever is induced by the Removal of all other Causes; as the Stimulus of Hope; Joy &c- Mephitic Air, and Poisons, and perhaps Lightning produce Fevers — they act by inducing Indirect Debility —

VII. Specific Contagions — these are not so numerous, and so often productive of Disease, as was once supposed — they are the Source of several Diseases - (viz.) Catarrh, Small Pox, Measles &c —

Lecture, 10th-

VIII. Certain kinds of Aliment, & Indigestible food retained too long, in the Stomach — induce fevers — Meat and Fish when kept too long, and in that Condition, taken into the Stomach — will be the means, of inducing Febrile Symtoms — and Fish, even when fresh, will sometimes produce the same Complaints —

I was lately called to a Gentleman who had a Fever Eruption, and intolerable Itching, in consequence of his having the preceeding day, eaten a hearty Meal of Cod Fish — Certain Poisons received into the Stomach; as the Stramonium Seeds, produce fever. —— Van Efflorescence upon the Skin —

The following Considerations, are worthy of attention - - -

1st - That all Contagious Diseases except Catarrh, are peculiar to the Human Species. - Thus, it was remarkable, that when the Plague raged at Marseilles, the Dogs who licked the Sores of those ill with it, were not in the least affected with the Disease -

2d - There are Contagions which are peculiar to to Certain Animals, and not to the human Species - thus Cows, Horses, and Sheep, have have each some peculiar Diseases, which when Epidemic affect no other Animal, but those of their own kind - as the Rot, in Sheep &c - Contagions affect different Colours & Discriptions of Men - the Negroes of the West Indies were exempted from the Yellow Fever that raged there - and Dr Lining of South Carolina, in his Treatise of the Yellow Fever, mentions that none of the Negroes, were affected with that Disease - when it raged there, with great fatality among the Whites - Dr Hume remarks, that no Negroes were affected with it; when it prevailed in Jamaica in the Year - except those about the House; who were in some measure, brought up as the White People - - -

In Virginia an Epidemic appeared, which affected the Negroes only — this fact extends to the Indians, and White People at Nantucket, and St. Martha's vineyard where some Indians were — Epidemics sometimes make their appearance amongst those which did not affect the whites — and the white Inhabitants were sometimes seized with Epidemicks, & the Indians escaped —

4th — Contagions, are peculiar to certain Ages of the human Species — There are Catarrhs, which affect Children only, & sometimes grown persons only, — I have seen a Catarrh prevail among the Children, in this City, and not one above two years; & under four months were affected with by it — There are Epidemics which affect Children of particular Ages only and some which affect all —

Are there any means of preventing the effects; or of destroying Marsh, & Human Effluvia? — Yes, these Effluvia may be destroy'd 1 — By Fires — the Benefit arising from them is the free circulation of Air, excited by their action, & probably great Advantage is derived from their Heat — Dr. Blane remarks, that the Sailors, and People on Board the Ships, coming from England — always grew better the nearer they approach the west Indies; and the contrary when they left that place —

Cities in the Fall of the Year; are more healthy, than the Country, it is probably owing to the Fires, that are used more early in the City — than Country — I have heard of a Gentleman, who was obliged to stay, during a very Sickly Season, in a Town of North Carolina; and at a time, when all the principle People, left the Place — having kept himself, entirely free, of the Fever, & Ague by making Fires, every Day in all the Rooms of his House —

2d — By White washing the Rooms — by this means they are not only prevented but Checked —

3d — By Vinegar Sprinkled upon the Floor — Burnt Gun Powder, and Sulphur — — —

Dr Cullen used to relate a Story, of Admiral Hawke who with a Number of his Men, were ill with a putrid Fever, at Sea — but during an Engagement with a French Frigate got quite well — That Sulphur, will destroy the influence of marsh Miasmata — I am certain — from a fact related to me by a Gentleman of Burlington; who paid upwards of twelve pounds, to his Physician, every Year; — but one Fall the Man, who Painted his House; having by mistake, mixed a large quantity of Sulphur with

his Paint — his House smelt very Strongly of it, and his whole Family, escaped the Fall Fever; which they had not done, for a number of Years before —

4th — By Trees, near the house, provided they are not planted too close to each other: or too near the House — for they absorb, their Effluvia, and Exhale a very pure Air —

5th — By volatile Alkali: exhaled from humman and other Feces — Madrid & Edenburgh are very Dirty; yet notwithstanding, are very healthy — — The Plague in London, was checked by opening common Sewers, and Rivers —

6th — By the Cultivation of the Country, Clearing the Countries makes them Sickly the Swamps in Maryland, do not affect the People, when Trees are standing in them, because the Sun then cannot act upon them,

7th — By Cleanliness. 8th — By fresh Air —

9th By Bathing; in Salt water; or water, impregnated with Salt, — —

10th — By Anointing the Body with Oil. — The Africans escape the Disease, by this means — and the practice of the Indians, in Rubbing their Bodies with Bears Grease, is Similar, / —

11th By Generous Diet, & Cordial Drinks — especially when taken in the Morning, and for this purpose Salt Meat is particularly usefull — and even Spirits are sometimes necessary — they produce healthy Excitement, 12th By equable warmth from Flannels, and Corcked Shoes — 13th By Avoiding Fatigue, Morning and Night Air, — 14th By Issues — 15th By Frosts & heavy Rains — and Storms — of Winds according to Dr Huxham, (instance of Hurricanes) — A moist Air, when there is no Wind; is favourable to their Action — 16th By a firm Mind, produced by a constant dependance upon Providence; Mr Howard says that this united with Cleanliness, enabled him to visit every Abode of Disease, uninjured —

Is Tobacco a preventative against any of these Diseases? — No. It did not prevent the Plague, according to Mr Howard; nor the Influenza according to my experience — If it succeeds, I suppose it must be owing to Faith, and a firm Dependance therein —

These Diseases are much less frequent, than an 100 or 200 Years ago; In Sickly Seasons, and Places. Rising early is improper, and Injurious — Are there any means of destroying the Contagions of the Measles, &c. For Dr —

None have yet been discovered — But I think the Time will arive; when certain means, will be discovered, as efficacious in destroying the power of these Contagions; as Sulphuris, in destroying the Powers of Antimony —
On what parts of the System do Contagions, exert their action? — They exert their Action, on the Arterial, Nervous, and Lymphatic Systems, the Alimentary Canal, Mucous, Saliva, the Blood, Bile and Surface of the Body. — The excess of irregular action, or deficiency of regular action, shows itself in the Arterial System — Glandular Swellings, shew their action on the Lymphatic System. Vomiting and Purging; show their action on the Alimentary Canal. —
The peculiar Acrimony of the Bile, shews that these Contagions act on it —
Is this Acrimony owing to the mixture of Contagions? — In proportion as Diseases, have a Septic tendency, the Bile is secreted, in a greater quantities (See Dr. McClurg) Bitterness is the offspring of Putrefaction; as instanced in the Skin of Rotten Apples —
The action of Contagions on the Skin, is manifested by Petechia —
Is there any method of preventing Contagions, from affecting the ~~body~~ human System? —

Yes, Bark and wine sometimes prevent them; when they affect the Alimentary Canal, an Emetic will sometimes carry their effects, off; to this should be added abstinence; or a light Diet ——

Typhus Mitior, — Can we know, the Approach of Typhus Mitior? Yes — the Approach of the Typhus Mitior may be known by — Great Lan= =guor of the Body; Costiveness, Headach, Dry Skin; here if a Nausea attends an Emetic given, is almost a certain Cure — and wine given likewise frequently prevents its accession — the same Symtoms accompanied with Chilliness, indicates the Typhus Gravior more certainly.

The Fever called the Break Bone Fever, or the Remittent Billious Fever, was almost always cured by an Emetic, Rest and Abstinence, from Gross Food — (when taken in the Beginning) Dr. Mitchel says Bark, prevented the approach of the Yellow Fever, — It was used before the Fever was formed ——

I shall now proceed ~~to Curidas~~ to the Cure, of Fevers — depending upon excess of irriqular Action produced by the above mentioned Causes. The Symtoms produced by this excess of Irregular Action are, Pain in the Head, Delirium,

Redness of the Eyes - Burning heat in every part of the Body - hence it is called an Ardent Fever, It resembles an ~~Ardent~~ Inflammatory Fever, differing only in the remote Cause; i.e. Contagion,

These Fevers are the Plague; - the Yellow Fever, and high Bilious Fevers -

The first general remedy for Fevers, depending upon excess of Irregular Action is,

I. Blood-letting - it is proper in all ~~violent~~ cases of violent Action - the Pulse here is, generally hard - and full. I scarce kewa case in the Yellow Fever, that did not require V.S. sometimes the pulse is weak, and low, from excessive Action, producing Indirect Debility even here Bleeding is sometimes proper - for the Pulse will frequently rise after it. (like a case, from Dr. Cullen) Dr. Huxham, Sydenham, and Pringle, all agree it is proper - Dr. Huxham says that he would use it - altho he knew that the greatest Pestilential Disorder would follow - Bleeding ought only to be used in the Begining and be taken in small quantities -

II Emetics. These ought to be given only when the Bile has not been sufficiently discharged - they ought to be used in the early period of the Disease, - but may sometimes with propriety be exhibited in the advanced stage: tho there is great Debility -

It is true Emetics debilitate – but as there is Morbid Excitement in the System, may be advanta=
=geous in taking it down – – –

III, Purges, they are in general safer Remedies, than Emetics, & should be given where Emetics are thought improper – they should be of the lenient kind as, Senna, Glaub. Salt & Manna, and should be repeated every other day – because there is continually an accumulation of Bile, they agitate the System less than Emetics – it is always safe to administer them, as long, as the Tongue continues Moist – when dry, it indicates great Debility – together with these Remedies, Clysters are very proper, and ought to be administered frequently –

IV, Cold Air, – This may be used as a debili=
=tating Power, as these Diseases frequently occur when the weather is warm – we cannot employ Cold Air then so advantageously – however where a Draught of Air, can be procured, it may supply its place in some measure – Dr Huck relates the case of a Sailor, on Board of a Transport – he supposed him to be dead, order'd him to be carried on Shore & Buried, that he should not infect the Rest – he was raised from the Hold, by a Tackle, & lowered by the same means into the Boat – – –

as they rowed to Shore, a Land Breeze Sprung up, which blew directly upon him - before he got to Shore - he discovered Signs of Life in him - they carried him on Shore, & placed him under a large Apple Tree - he afterwards came too and perfectly recovered -

V. Cold Drinks. This has been recommended by Celsus and most Authors since his time, they are more agreeable when Acidulated,

VI. Cold Bath - This is the practice of the Indians, and Negroes in Affrica in the Small Pox, which seems to confirm the propriety of its use - A Fact is recorded in the history of the Plague by a Sadler; a Man in a Delirium escaped from his Physician, and threw himself into a River; and was, by that means Cured -

VII. Avoiding all Stimulating Causes - also removing the Faces & Urine as often, as they are discharged, and Cleaning the Mouth and Tongue, of that disagreable matter adhering to them, which by accumulating, may become very Injurious -

VIII. Changing the Linen, & Sheets, & likewise Changing and Correcting the Air, as - 1 - By opening the windows - for the purpose - 2 By Fires in the Room, these are very necessary -

3d – By twigs of Trees, especially those of the willow, being placed in the Room –

4th – By pouring Nitrodic Acid on Com. Salt,

5th By removing some of the furniture, of the Room, as the Curtains &c – which retain the Infection –

6th – By placing the patient in the middle of the room – (a Case where it was of advantage this discovery was first suggested by a Negroe man, to a New England Physician –

Is Opium proper in the excess of Irregular Action – No it is extremely injurious –

Are Blisters proper? – Pringle, and others, warn us against their use, on account of their bringing on Strangury, and Mortifying Sores – In the Begining of Fevers, the Stimulus is too great, but the period in which their application is most proper is about the third, or fifth day – An Obstinate vomiting, sometimes occurs in these Diseases; and can only be checked by the Application of Blisters to the wrists, Ancles or Thighs – I shall now make a few observations on the application of Blisters –

1 – Blisters should be allowed to lay on, till

they raise the Cuticle, and no longer —
In general Six Hours will answer, but it often requires twelve, twenty four, and even Forty eight hours to produce the effect —
2d — A piece of Muslin should be applied between the Blister and Skin, which will prevent a Strangury — if it should come on Demulcent drinks, in Conjunction with Laudanum cures it —
3d — Cabbage Leaves are improper to dress Blisters with — because they putrify, and become extremely offensive, & Injurious —
Cerat: Simpl: is the best application for Blisters — it is made of equal parts of Bees wax, and Oil or Hogs Lard — when the part is very much inflamed, a Poultice applied to it is proper —
4th — Cutting away the Cuticle when it has risen is very improper —
5th — Keeping them running is improper —
In what manner do Blisters operate? —
In topical affections they operate as, evacuants — In Diseases of Debility, they act as Stimulants — they act partially when applied to the Neck; as in Apoplexy —
Are Sudorifics proper? — No, not until

the irregular Action of the System is subdued, After Irregular Action, is overcome the Chief, indication then is to Correct, or Obviate Debility —

Lecture, 11th —

The Remedies for Obviating Debility, after irregular Action has been subdued are Stimulants — 1. The Diffusible — 2d The Durable; 3d Mixed — The diffusible Stimuli are Wine, Porter, Æther, Opium, Volatile Alkali &c —
The Durable Stimuli are. Food, of every kind
The mixed Stimuli are Garlic, Bark & Mercury — Blisters, warm Fomentations, Cataplasms of Garlic, and Mustard, and Salt Fish applied to the feet, are External diffusible Stimulants with these the Stinging of Nettles — — The Diffusible Stimulants, are of Different degrees of Strength; moderate Debility should always be opposed by the weakest Stimuli,

Wine is one of the weakest Stimulants, we ought to begin with it where Stimulants, are Indicated — we should use in the first place, wine & water, and afterwards wine; increasing it to five or Six pounds in a Day — Wine in order to to be effectual, should be constantly given, in the Day; and particularly at Night, on Account of the Abstraction of Stimuli, of external

Objects during the Night — it should likewise be given particularly about the Crisis of the Disease, and in large Quantity, — at this time the utmost Caution is necessary — for the Excitement is then Low — and the Pulse, & Vital parts, are apt to Sink — the Physician in these Cases, should sit up with the patient,

An Idea prevails among Some, that Wine will Intoxicate the patient — but this is false, because there is little Excitеability to act upon.

Then Porter, and all Malt Liquors: which are, excellent Stimulants, Porter is preferable, because it is of a better Quality, than common Malt Liquors. Next Volatile Salts, from 5 to 10 grains in a Dose, is an excellent Stimulant; Ether & lastly, Opium, this last appears more efficacious; but not so successfull till the others have been used for some time — the presence of a Septic tendency may be known by the great Debility, weak Pulse; Delirium, high colour'd Urine, Dry Skin, Black Tongue, and Cadaverous Smell of the Body.

If the above Medicines fail, we must have recourse to Bark, — the Infusion of Bark, should be first given; & afterwards Huxhams Tincture joined with the Bark should be used. 1/4 oz of Bark to 3ß of Huxhams Tincture, a little Peppermint water, with as much Common water as will make it Agreeable — a full Spoonfull of this should be given 4x a Day.

If the Stomach should reject this Mixture; add a little Laudanum to it, about 30 drops) and if that does not answer, administer it in form of Glysters, to the quantity of ℥ij every two hours — if this fails; the Body should be wrapt up in Sheets, that were previously dipped in a Decoction of Bark, (in this manner I cured a Friend of mine)

There are cases where Spirits have been found usefull where the above have failed; but wine is better, and more Nourishing, than Spirits; if it will stay on the Stomach — after these have been used, to no purpose, we must have recourse to Opium — I shall here make a few remarks with Dr. Brown on the use of this Remedy. Opium is a Stimulant, and all its Phenomena may be explained from that Operation, Its effects in preventing Sleep among the Junks, is a proof of its Stimulating power — Inflammation It sometimes produces Inflamation, in the Stomach, of those who have made frequent use of it — It promotes Sleep, only when the System is below the Sleeping point as in these Diseases — Dr. Mead justly calls it Magnum Donum Dei. It injures in all Cases of Inflammatory Action, It removes Coma, promotes Sweat, and removes the Spasms, and Tremors in the Close of Diseases — of Debility. — here I was led to the use of it first,

by a Lady; who mentioned the effects of it on a Gentleman, who by Accident had taken a large quantity of it — it raised the pulse, promoted a Sweat &c — and he awoke afterwards perfectly well — I formaly considered it as injurious, in the Diseases depending upon excess, of irregular Action — But in Diseases depending upon Defect of Action; it is highly proper, and usefull: We should begin with small Doses — 1- The less the defect of Action is the quantity used should be in proportion less — in this respect ten drops will be more effectual, than perhaps Fifty at other Times. as in Pneumonia, when begining to get well it is used in small Quantities ——

2d — The Pulse should always be felt, to determine the Dose of Opium; as well as to Bleed, the Dose should be increased with the increase of Debility —

3d — It should be given in small Doses, all Day, as well as at Night — the Dose should, be increased at Night — It has been given to the quantity of 4 grains in Typhus Gravior —

4th — It should be laid aside when the System, becomes accustomed to its Action for a few Days; and other Stimuli used in the place, of it, as Wine, Volatile Spirits, and Bark —

It is of great Consequence, to alternate all these Stimuli, and not to use them all at once, Dr. Mitchell has proved this, that after a few days, omission it recovers its operation again, It is common to use Sudorifics - but they are Unnecessary - as the above are sufficiently such,

Is Sitting up proper in these Diseases? - It is not, except when Changing the Linen, sometimes there appears more action in the patients than real Power - and they Die sometimes on going to Stool - &c.

Is Cold Air proper? - No - but too much pains cannot be taken to introduce Fresh Air into the Room in these Cases, for it is a Stimulus - Fires are very proper to make the Air Circulate - its efficacy we can mention in many Cases - the Officers, recovered more generally than the Soldiers; because the former, had the Enjoyment of more fresh Air, than the latter - Are Cold Drinks proper? - No - except when there is partial excess of Action on the Stomach - -

Is purging proper? - No - except when there is, an Accumulation of Bile and Faces - I have permitted my Patients to go 2 or 3 days without a Stool - for this I have the Authority of Dr. Campbel

Warm Drinks are proper, they gently Stimulate — Glysters are improper except those that Stimulate — Can any use be made of the passions of the Mind? — Yes — I will relate an instance in favour of them, which happened during the Late war — A person in Brunswick being very ill of this Disease, heard that a Party of British Light Horse, was entering the Town — he started from his Bed; and ran two Miles, without Stopping, and when his Terror had left him, he found himself well —

There is a material Difference between Fear and Terror — the first of these is a Sedative — the second is a Stimulant — Hope and Joy, may be recommended; and are fit passions to be excited — but it is more dangerous in recomending Terror, as it is not so much in our power, as the two former, with respect to the degree — Of the wonderfull effects of Hope, Dr. Lind tells a remarkable Fact, in Soldiers, about an Engagement — &c. Confidence ought to be inspired — and the History of more dangerous Cases, than their own should be mentioned, where they have perfectly recovered — The knowledge of Death sought to be Concealed from them, & Old women,

or those who posses weak Minds, should be kept out — and their Friends, sent for. without their Knowledge — Good News, of an interesting Nature, should be told to them — the Ringing of the Bells, are very improper and injurious — On account of this Dr — Shovet forbid it at the time of his Burial; which was almost the only Good thing, he had done. —

A patient should be encouraged to make his will — The dread of Death & Eternity, should be prevented from operating on his Mind — hence pious Clergyman should be admitted into the Room — the Physicians themselves should interfere if there is no Clergyman to be had, & by that means, have more confidence placed in them — Should the Understanding be Exercised? — Yes — the application of the Mind to those things, which cause Strong Stimulating effects, is of great Service, in this Debilitated State of the System — even the operation of the will is of great Service here — It appears to have great Empire over the Human Mind, — the Negroe Slaves, from hence, perish sooner than White People, from a less desire to Live) — — —

Lecture. 12th

Typhus Mitior,

Dr. Cullen, defines it to be, a contagious Disease — the Heat not greatly above the Natural — the Pulse small, weak, and for the most part frequent — the Urine little changed — the Functions of the Brain very much impaired. — and the Strength greatly diminished.

It is called the Jail or Hospital Fever, it sometimes comes on after Inflammatory Fevers — it is produced frequently, by Human Effluvia — in Hospitals it has been produced by the Smell of a putrid Leg — by the Dysentary &c — It has the Smell of Rotten Straw —

This Disease, differs from the Typhus Gravior, in not being accompanied with a Chill, and by its coming on Gradually, and continuing a long time, (for the space of 30 Days) this continuance is owing to a mixture of Inflammatory Diathesis with Debility; & is therefore called Typhoid Diathesis — it runs on to a low Nervous Fever; — It generally appears in the Fall, In Typhus there is a mixed Diathesis in the Begining, — It Remedies are,

1 — Gentle Bleeding — I am afraid to Bleed,

when there is no Chilly Fit, hard Pulse, or where the Season of the Year is unfavourable; or when great Symtoms of Laziness, or aversion to motion is manifested

2d. Gentle Doses of Tart. Emet. should be given, so as to excite a gentle Nausea

3d. Purges, these should be of the Lenient kind;

4th. Blisters are Usefull —

5th As, Action in the System decreases; we must have recourse to Stimulants —

6th Volatile Alkaline Salts —

7th Opium, we should begin with Small Doses —

8th — Stimulating Cataplasms, & Fomentations, to the feet

9th Bitters, as Chamomile Tea. & Gentian, added to it; when the Stomach cannot bear the Bark —

If Debility increases, we must give the Bark, How shall we know when it is proper to give the Bark? — the following Symtoms make it proper — 1. When Tremors attend the patient, it is always very proper —

2d — If no difficulty of Breathing attends, it is proper — but when this is present. it Shows Congestion, and Bark then appears to be improper —

3d — When there is an absence of Thirst, it is proper —

4th — Gentle Sweats, even when partial, afford a Presumption for the Safety of giving Bark —

5th When the System is much Debilitated, a Small Cough always comes on; in this respect Bark, is Usefull — Dr Rush, mentions the case of a Gentleman; who had a Typhus, last Year, it continued about 20 days; a Languid Circulation, brought on Viceral Obstructions, especially in the Side — to remove it he ordered ℥ss of Ungt Merc: to be rubbed on the part affected, the next day he found him much easier, he told him he had a very Sore Mouth; and as the Soreness of the Mouth increased, he also, increased in Strength, and Spirits — Sometimes a troublesome and Continued Vomiting, happens in this Disease — In Order to remove this, if Opium does not, we must make use of Chammomile Tea, Riverious's Mixture — Or Bolus's of Volatile Salts, to the amount of 5 grains in each dose; with Lime Juice — Or an Infusion of Columbo Root — Pain in the Head, is sometimes, a troublesome Symtom — it may be relieved by, Camphorated Spirits. Ether, Vinegar, or the Application of Blisters to the Neck — Wakefullness &c is cured, by Opium — Opium is particularly usefull, in the last Stage of this Disease — when Maniacal Symtoms prevail —
Deafness is a favourable Symtom; according

to Dr. Hurham, it generally comes on Late —

When Tremors attend they are to be cured by Opium, In the last Stage of this Disease, when the pulse, is at, 60 or 70 they often recover, — in the first Stage - it is often at an 100, or 104, — When Diarrhea attends, it is, to be removed by Laudanum, & Testaceous powder, After the Crisis of the Disease; the Patient is still, the Object of Medicine — the Convalescent Stage, and the excess of Excitability in this Disorder; should be attended to, — the Symtoms are - Wakefullness, neat Swelled Legs, from mere Debility — Bad Ulcers from Blisters - Abcesses in the Parotid, or Inguinal Glands - vomiting sometimes, especially in the Morning — Want of Appetite, or an excess of it - Defect of Memory - weakness of the Moral Faculties - Fatuity, and Mania sometimes — And a Diminution of the Intellectual powers — All these are applicable, to both the Typhus Mitior, and Gravior - (A Case of Dr. - - - A falling off of the Hair, & Changing the Colour - a drawling Voice - Costiveness, & a Feverish Disposition in the Afternoon, often succeed these Diseases — It seldom goes off with a Sudden Crisis, but gradually. — The Remedies are — 1 - Diffusible Aliments - as Broths, White Meats, Boiled, for Roasted Meats are not proper — Plutarch says, that Alexander put to Death,

a Physician, who gave his Friend a piece of roasted Fowl, Oisters, Chocolate, &c— I have observed a singular fact with respect to the Convalescent Stage of this Disease— that the patients, altho' they have not strength in proportion to the Aliments they take in, grow fat in their Chambers, & weigh more, than when they were first seized with the Disease,— (I knew a Lady &c)

2— Cordial, & Nourishing Drinks are Good— as Porter, & Malt Liquors of all kinds— Wine is too Stimulating and is injurious here— 3— Business of every kind, should be delayed, for thinking is too great a Stimulant— even Good News, that concerns the Patient— or an Absent Friend should be introduced cautiously— Mirth and Pleasure should be avoided— Gentle Exercise in the Open Air, is of great Service— Huxhams Tincture in moderate Doses should be given; Cold should be avoided, by being Clothed in a warm dress, & by Stove Rooms— Opening Medicines, injure, and are to be avoided— Reinfection ought to be guarded against— for this purpose, he should avoid using the Cloths, he wore during his Illness— and perhaps should be removed from his Bed— If Swelling in the Parotid, or Inguinal Glands, should appear, they must be ripened, by Stimulating Plaisters, for they are too hard

In Fevers of all kinds. the utmost regard ought to be paid to the Character of Nurses. because there are some who are apt to awaken the Patient, and give the Medicine, at improper times -- they are likewise apt to give improper Food, or Drinks, or keep them too Hot, or Cold,

In Critical cases proper persons, ought, to be Chosen to attend upon the Sick in whom Confidence might be reposed - - —

Lecture 13th -

We now come to Speak of Fevers, of excess, and deficiency of Action, without Inflammation, and first of the

Plague.

Dr. Cullen defines it to be a ~~Contagious~~ Typhus. exceedingly Contagious - with the highest debility; on an uncertain day of the Disease, Buboes, and Carbuncles break forth - It is various in degree; but the Species are uncertain — for the History of this Disease, I refer you to Dr. Cullen — who has given an accurate History of it —

The following Facts relative to this Disease, are taken from Mr. Howard —

1 - It is propagated only by the Touch; and at a few Feet distance — Tar, did not secure those

from the Plague, who worked among it; for the 10,000, are said in 1664 in London, to have remain'd free from this Disease; by retiring to the Shipping yet the Inhabitants of Wapping did not escape it, who live among the Constant Fumes of Tar, It is not carried through the Air, — some circumstances make it probable, in London; that the Infection, was carried thro' the medium of the Air, because many who confined, and excluded themselves, entirely from the Infectious; caught the Disease, — but this mistake was soon Manifested, and the Infection was found to be carried about, by Dogs, Cats, and other Animals — In London, 6,000 Cats were killed &c —

Q — It lies concealed from one to 3 Years in Clothes — by the Natural Infection, it appears generally in three days, & never goes beyond 14 Days, before it makes its appearance; therefore it shows a great Analogy to the Small Pox —

By Innoculation, it appears in four Days. & by it the Disease is rendered Mild — there is no very considerable Advantages arising from Innoculation, because that will not secure them, against future attacks, but appears only to fortify them against it while prevailing, — A Physician in Moscow, generally Innoculated himself, when it raged there, and always had it very light, and could go

among his Patients after that, without so much of receiving the Infection — People take this Disease, more than once in their Lives — It sometimes comes on like an Intermittent — It is very remarkable, that a Person may infect another by his Breath, before he knows himself to be Infected — Sometimes it kills Suddenly

The General Symtoms by excess of Irregular Action in the Begining sometimes produces Death — the Buboes, Carbuncles, and Sores which appear in this Disease are only Secondary Symtoms — Sores on the Wrist &c — are bad — the harder the Buboes & Carbuncles, are the more dangerous it is — the Buboes of some who had the Plague in London, were so hard; as to resist the Action of the Knife — which obliged them, to use the Actual Cautery — This Disease some-times terminates on the 3.. or 5th Days, and at other times not untile the 21st — or 40th — hence it is like the Typhus Mitior — when the Sores are not Cured for 4 or 5 Months &c — — — —

Newly Married people & Lying in Women, are most Subject to it, or those who use excess in Venery — A Physician &c —

Dimness — Great vivacity, or Turbedness of the Eye are Signs that the Disease has been taken — a Pain, or Smarting of Ulcers &c — shews that the Plague, or its influence is present — — — —

A Sadler of London, who gave a Good Histoy of the Plague, as it appeared then, says he knew a Man who had an Issue in his Leg — which by Smarting, gave him Information of the presence, of an Infected Person, when he was in Company with those persons, who had received the Infection — this Issue would give him generally some pain; & he would immediately cry out, that some Person in Company was infected with the Plague; upon this Information, the Company always dispersed themselves, and in a Short time afterwards; it was generally heard that one of them had taken the Plague, Issues perhaps do not Act, by discharging any Thing, but merely by giving information; or Notice of an Infected Person — It prevails in all Seasons except in very hot Summers, or very Cold Winters, It is not contained in the Air — hence those who, escape from Infectious persons; do very well —

This Disease arises Spontaneously — In this respect I differ in the Opinion, which I gave Last Year, concerning it — from the Authority of Dr. Ross, in this City who says it generally appeard in — after a Warm & Wet Spring. — The treatment is the Same; as the Disease of Excess, or Defect of Action, formerly mentioned (viz.) the Jail Fever, as Bleeding &c — Dr. Sydenham recommends it,

He says when the Patient stood up &c. —.

Fires constantly kept in the Chambers of the infected are certainly very usefull, and necessary. ——

The Preventatives are, avoiding Contact with infected persons, or their Clothes. — In the Account of this Disease, published by a Sadler, who was in London, when the Plague raged there — we find that people, with long Hooks, tore off the Clothes of those that Died of the Disease, and then they could be handled, and Buried, without any Danger of the others catching the Disorder; for the Contagion was communicated by means of the Clothes — Washing the hands, and Body, with Vinegar, is said to prevent the Plague — thus the People who went to Market, usually carried the exact Sum of the Things, they wanted to Buy; and the Butchers, always had a Cup of vinegar, for the purpose of dipping the peice of Money into it — whereby they escaped the Disease. — — Dr Dimmerbroeck, made it a Custom, before he visited the Patients infected with this Disease; generally to wash himself with Vinegar, and by this means, escaped from the Disease: but one time unfortunately forgeting his usual Custom visited his patients; & afterwards received the Infection — but from that attack he recovered, and after that period, was carefull not to forget his good Custom

Ipues have been said to prevent it — A vegetable Diet has been observed to be usefull: as a preventative to this disease — the Greeks. Mr. Howard, informs us, who live upon a vegetable diet; never have the Disease — Great Commotions of the Earth, or Atmosphere as Earthquakes, and Hurricanes have been said to check it — The fixed air, is discharged from Vintages has been found to be serviceable in preventing it; (according to Mr. Howard, who particularly enquired into the Subject. Tobacco did not prevent this Disease — Wine & Sugar are great preventatives — No Country in Europe, is insfected with this Disease, since the General Introduction of Sugar among them — The Memory is much impaired in this Disease — hence it has an Analogy to the Typhus — in deficiency of Memory, this Disease too like Typhus is often prevented, by taking an Emetic before it is formed. It is not so fatal now as formerly — the accounts of the fatality of this Disease, has been much exagerated in Turkey. For first the Physicians in Turkey, are not paid for their attendance on Patients who die, except those in the Plague — Another reason is that when persons are in Debt, and are surrounded by their Creditors, they cry out from their Houses that the Plague is in their Houses —

A third reason is – that during the time of the Plague, all Deaths, – from whatever Quarter they may arise – are attributed to it (see the Sadlers Account) I shall conclude the Lecture with this Remark, that we should by no means fly from this Place; if the Plague should happen unfortunately to arise visit us; for by flying from the Country under such circumstances – we should disgrace our Profession – We ought in such Situations, ever to remember, this Memorable saying of Sydney Wherever we are placed, where we cannot preserve our own Lives – without committing a mean Action, we should consider ourselves as called upon to deliver them up – – – – –

I shall now deliver a few observations, on the

Yellow Fever.

This is a Disease of warm Climates, and is very frequent in the West Indies — It never infected the Negroes, and Creole Women; exists in North Carolina — This Disease prevailed in this City in the Year 1742, and 62 and was occasioned, (as Dr – Lind observes) by a Young Man's Clothes, being sent here, and worn – who had Died of this disease in Barbadoes — It affects Strangers, and Sailors, more than the Inhabitants For the History of this Disease I refer you to Dr – Hume,

Its predisposing causes are: Intemperance, Fatigue, Insolation &c—
most commonly in Summer it did not spread, but in Winter it did — hence Cold favours it, Dr Blane observes that the Contagion, producing this Disease, will lay dormant, while the Vessel, is in a warm Climate, but when it comes to a colder one, is rendered Active; because the heat acts as a Stimulus, and prevents the Contagion from acting. — In Virginia it prevailed in the Year 37, & 41, and appeared there in the winter, and Spring, but not in the Summer: it was imported here from the west Indies —
It is something remarkable that in the west Indies it arises Spontaneously, & does not appear to be propagated there, by Contagion — but when it is exported to other Countries; it Spreads by Contagion — Dr Hume's, History of this disease is as follows — I saw it in the Year, 63, —
It came on with Chillness, Faintiness, Glowing or flushing in the Face, Sickness, Vomiting which is generally Billious, in the Beginning — Soreness, and very great Oppression at the Precordia, this is the Pathognomonic Sign of the Disease. Difficult Respiration — Throbbing of the Temporal Arteries — Listlessness & Despondency, the Pulse is full, quick, and Strong, on the first attack, But Shortly afterwards, becomes Regular &c —

Blood drawn is florid, and Lose; after 44 hours — the Eyes change to a Yellow Colour; and after a few days, Blood Issues from different parts — there are frequent Hemorrhages, from the Nose, Lungs, Stomach & Anus — the Pulse is then fre= =quent and irregular — Black Vomiting frequently comes on; which is said to be a Sign of Death — it appears like Coffee Grounds; and when a person is taken with it, mostly proves fatal, but not always so, because I saw a person, who had a Black Vom= =iting recover perfectly — Grumous Blood is likewise voided by the Anus — after Death, Livid Spots appear on the Body — these are the Symtoms but they are different in different persons — some have no Chilliness &c — Dr — says, the following are the Characteristic Symtoms, of this Disease — as Sickness & Billious Vomit= ing, Yellowness — Soreness at the Precordia — Difficult Respiration, Florid Blood, and Lose Craparamentum — Dr Hillary says the following Symtoms, are Characteristics of this Disease, Yellowness which first appears about the Mouth, Temples, Neck and Eyes, — the sooner it appears the more dangerous — It generally comes on the 4th — or 5th — Day. In this Disease, Hemorhages are unfavourable Symtoms — Stools like Molasses; are likewise

very unfavourable — Small Boils breaking out on the Body, and Eruptions of Pustules on the Breast, are favourable Symtoms —

Cure. Dr. Mitchell says an Emetic often cured it, when it was just comeing on — the loss of a few Ounces of Blood, before the Action of the System takes place — often prevents it: and Sudorifics which are hurtfull, after the formation of the Disease, are very proper before it is formed — Dissections shew Great Inflammation in the Stomach, Bowels, Liver, and sometimes in the Brain —

The Remedies are in the first place — Bleeding — Lenient purges, as Gentle doses of Glaub: Salt ℥ss every two hours — Cool Air, and Cool Drinks — In Italy they use Aqua Gellosa, or Ice water in this Disease, When there is not a Great Septic Diathesis in the System. Blisters may be applied to the inside of the Thigs —

There is sometimes a troublesome bowriting accompaning this Disease — it is to be checked by Bitters, as the infusion of Columbo Root, Snake Root, or Chamomile Tea #or (In the west Indies they use the Juice of the Cocoa Nut) Opiates are hurtfull —

#or Laudanum gtt. 15 & one or two gr. Vitriol. Alb. used for the same purpose by Dr. Brown of Boston, An excellent remedy —

Fomentations to the Stomach, have been used with Success; and also Plaisters of Venice Treacle.

In the Second Stage of this Disorder, the same Remedies which are used for checking Debility in other diseases, are applicable here. — — —

Billious Remitting Fevers.

I refer you to Cleghorn; — This Disease is common in this City — The Remedies are — —

1 — Blood-letting, when there is too much action in the System — In some cases Bleeding has been repeated two or three times with Advantage — the Blood is Sizy in all cases. — In this Fever, the Liver is frequently affected with Inflammation. It is distinguished from Hepatitis, by its going off like an Intermittent Fever — it sometimes terminates in an Abcess in the Liver — in this case it requires copious Blood letting, in order, to prevent it — I attended a Lady in this City, whom I bled five times — but notwithstanding this; the Liver Suppurated. But if I had ordered, ~~as~~ her, a sixth bleeding — it probably would have prevented a Suppuration. — —

2d — Emetics — if other circumstances do not forbid such as in Hematemesis, and Pregnancy where it would be improper — and then — —

3d — We should use Purges — — — — — — — —

Bile is always to be carried off by artificial means, when any

A tea of Sweet Fern tops recommended by Dr. N. Smith in this disease —

4th Blisters are proper —

5th Bark — this may be given, when there is, no convulsive action, in the System Bark should be given, in the first Intermission — but not untill the above mentioned Evacuations, are performed — Viceral Obstructions should induce us to give the Bark — in this Disease — If Bark disagrees with the Stomach, and vomiting ensues; Laudanum, and Lime Juice, should be added to the Bark —

Febricula.

This is a little Fever, called by Sr Richard Manningham, Febricula, it commonly makes its appearance here in the Fall. — it sometimes continues for 40 Days, — it is sometimes very troublesome; and falls upon the lungs, it is very frequent in Maryland — It is accompanied with a Slow Fever; & Chills, — and sometimes with a Diarrhea — The patient is not so Sick, as to be confined to the House, in this Disease — but he is able to walk about — I have been frequently Baffled, in Curing this Disease, with Wine and Bark — Blisters, and Opium, are the only efficacious Remedies — — — — — — — — — — — —

preternaturae quantity is excreted into the bowels — not that it has any septical qualities, properties, tending to dissolve the blood in a living subject. as has been suggested from fallacious experiments unconnected

Lecture. 14th

Cholera Morbus.

This Disease occurs here in the Months of July and August – It is the first Disease that disappears after Cold weather – The Billious Remitting Fever &c.

The most frequent cause of this ~~Fever~~ Disease is, a cool or damp Air, after a warm Day — Summer fruits, evolving too great a quantity of Acid, in the Alimentary Canal bring it on. It most frequently occurs in the Night time, I knew it once to be produced in a Thunder Gust the debility induced by the cool Air, produced Excess of Irregular Action in the Alimentary Canal

it is attended with Copious Discharges, upwards and downwards – it is sometimes only — and sometimes downwards — I knew a Gentleman, who lost by this Disorder, Eighty pounds of his weight: in Thirty Six Hours — The Pulse is small, weak quick, and Irregular, there is a Nausea, and Vomiting, Faintness, Anxiety, Heart Burn, & Sweats: accompanied with Cramp in the Bowels, Arms, & Calves of the Legs, which is the most troublesome Symtom if all these Symtoms continue without

with life; but because the liver is in a Plethorical state, & undergoing too much action, & acquiring a turgescence & Plenitude in the

It is the action we must have in view & not the contents discharged
Restore the Healthy action — body must be kept warm — Stimulants
as C. Guaiac with Opium is very beneficial — warmth to the feet —

Intermission for the Space of 24 Hours — Death
commonly ensues —

If a Physician, should be called, to visit a
Patient in the begining of this Disease, he should
Order the Stomach to be washed first with Warm
Water, afterwards recourse must be had, to
Liquid Landanam, and this should be mixed
with Peppermint, or Chamomile Teas; or
any pleasant and Agreeable Drink — —
In giving Landanam; we should always
begin with Small doses — particularly if called
in the Begining of the Disease — and the dose
afterwards gradually increased — —
Demulcent Glysters given with Landanam,
are very proper — Plaistures of Venice Treacle
& Landanam should be applied to the Stomach
and Bowels; and likewise Flannels dipt in Spi-
rits — I have known Oatmeal, toasted untile
it was Brown; and then Boiled in water,
frequently to Stop the Vomiting, after Liquid
Landanam had failed — —
Thus we treat the Spontaneous Cholera —
There is sometimes an Accidental Cholera,
which arises from the too Copious Use of Summer
Fruits — Salt Fish, and Oisters, will sometimes
produce it, It is likewise produced, by the use of putrid Fish,
Pori biliari, & Ductus Hepaticus, that must stifle its funitions,
unless this surcharge be removed speidily through the Ductus Communis,

To check the vomiting when troublesome Ipecac. Camphor. rubbed upon the Abdomen — Blisters — Glysters of Soap Suds &c

In the College of Princeton; in New Jersey, the Pupils, (amounting to 60) were all Seized with this Accidental Cholera, which was produced, by Dining on Pigeons; that previously had Lived on Poke Berries — Certain Poisons, as Arsenic, sometimes bring it on ———

The Cure of this kind consists in — — —

1st — Evacuating the Contents of the Stomach, and Bowels — this is especially usefull after Crapula &c — — The Cause of these Cholera's existing, sometimes in the Stomach two, or three Days, which is obviated as soon as the Stomach is Evacuated —

2d — Demulcent Drinks, particularly if Injected by Clyster, as Oil and Milk — — —

3d — Diluting Drinks — — — —

4th — Lessening the Sensibility of the System by Opium — — Dr Roberts, prescribed ℥j of Salts to a Person, in the Cholera; and instead of this, the Boy in the Apothecary Shop gave him ℥j of Arsenic, he was afterwards treated, with Demulcents, Diluents and Opium, under the Influence of these Remedies, he recovered. (A Case of a Person who took Vit. Alb. &c —) Emetics combind with Alkalies & Lime Water & Sal. Absynth. ℥ij give 1 to 2 ℥ q. q. hora &c —

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into the Duodenum & obstruction prevented, by Stimulating the Intestines & increasing their Peristaltic motion &c —

Morley ———

Dysentary.

Definit^n

This Disease is defined by Dr Cullen to be, a Contagious Pyrexia, attended with frequent Mucous, or Bloody Stools, while the Alvine Faces, are for the most part retained. Gripes, and Tenesmus - - -

D^r - - says a frequent desire of going to Stool after Eating and Drinking, is a Pathognomonic Symtom of this Disease - - -

The Proximate Cause of Disentery, is an excess of irregular, and deficiency, of regular action in the Alimentary Canal, accompanied with Stricture of the Colon ——— Division —

It has been disputed among Physicians, whether this Disease is Idiopathic, or Symtomatic It occurs in the same Season that Intermittents do, and like them it succeeds Long dry & long Moist & hot weather — It is apt to affect persons living on Yams, Potatoes &c — rather than those, who live on Generous Diet — This Disease affects particularly the Poor - - Dr Sydenham thinks it depends upon a Specific Contagion - - - Diseases appear sometimes to have a Monarchial power; as the Plague, when it raged at London,

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The word Dysenteria, is derived from the Greek δυς with dificulty, and ΕΝΤΕΡΑ, the Intestines, importing a dificulty, or a disturbance of the functions of the Intestines ———

Dr. Sydenham says, seemed to banish all other Com=
=plaints, or Diseases - - - The Measles likewise
when it prevailed here, Banished the Scarlatina,
The Autumnal Fevers in the Year 1783 partook
of Symtoms, somewhat Similar to Scarlatina,
as Pain behind the Ears, Sore Throat &c - - -
and may not the Dysentary, be only a Symtom
borrowed from some other Idiopathic Disease?
May it not be owing to the Marsh Miasmata -
acting on a Contagion previously existing in
the Body? - - - In this City, the Billious Remitting
Fever, now is the Reigning Disease - and the
Scarlatina, likewise prevails in different parts
here, - But the Billious Inflammatory, Rem=
=ittent Fever, is the most prevalent; and in
almost every Case, partakes of the Symtoms
of Scarlatina - so as to make me Bleed, -
the Blood is generally Sizy - -

This Disease is generally Symtomatic in this City -
and which I think, may be called the Febris Introversa
of Dr. Sydenham, or a Fever turned in upon
the Bowels - - - - I shall here make a few Re=
=marks under four heads - Causes -

1st - The Idiopathic Disentary, generally disap=
=pears upon the approach of Cold Weather -
the Symtomatic does not - but continues
generally during the Whole Winter - - - - -

It appears contagious, even when Chronic --
2d – In this Country, the Disease is most common in High Situations: as at Chesnut Hill, German Town &c – where Intermittents are scarcely known; But in the Country below Intermittents prevail, and at the same time, that Disentaries do, in the High Situations ---- This favours the Idea, that it is a Symtomatic Disease -- --
3d – Its prevalence in the Country, is more common, and its Fatality greater than in Cities – which probably, is owing, to the more Generous Diet, of the Citizens – than that of the Country People, the Disentery is more common amongst the Negroes than White People, in the Island of Barbadoes; it is very common, among the Negroes in the Trading African Ships - --
4th – Summer Fruits, have been unjustly said to be the Cause, of this Disease – but this is a mistaken notion; for if given in a Moderate Quantity, it will tend rather to prevent – than cause a Dysentary. -- Many Diseases; but particularly the Dysentary - are prevented by Salt Meat – for there is no Disease, in which it is so especially usefull, as in the Disentary – People should eat Salt Meat more in Summer, than winter, and should Blend it with the Summer Fruits – Count Castilione was surprized, that on - - -

- - - - - - - - - - - - - - - - - -

Mosely, thinks it is not Contagious –

It is the custom with the Country People, to Eat their Salt Meat in Winter -- which is a very Absurd Thing - for instead of this, they should use it more in the Summer Season, in Order to prevent this Disease. --

History --

For the History of this Disorder; I refer you to Dr. Cullen

I have met with a fact in this Disease, (i.e) that Patients in general have a pain in the head -- Degler says, he never saw a patient with a pain in the Head - in this Disease -- It is most fatal to Old People, Women and Children -- the tendency of this Disease is always to Death. few Recover without the aid of Medicine. Treatment. The treatment must vary, according as the Disease is affected by the Season, and other Circumstances -- If there is an Inflammatory Diathesis, or Excess of Action present --

1st Blood letting is proper - but I have seldom found it necessary in this City. - -

2d Emetics. these should only be used, when great Nausea attends -- Tart. Emet. is the best, and should be prefered to others - - -

3d Purges, these should be of the Lenient Kind, as Crem. Tart. Glaub: Salts, Manna, Castor Oil &c -- these Purges should be used every day, while the Disease continues -- Jalap and Rhubarb, should never be used - because they are too Stimulating, and apt to create Nausea, and Inflammation of the Bowels - - - - - - -

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Mosely says --

The curative indications are to cleanse the Intestines & to cause a revulsion to the surface of the body -- When the disease is rapid the cure depends

If Rheubarb is used, it should be Toasted ——
Common Salt, and Lime Juice have been
used with Succes in the West Indies — particularly
by the Negroes — — Toasted Rheubarb should only
be used in the Second Stage, when the Action
is Subdued — —
4th Clysters — these should be of the Demulcent
Kind, as Flaxseed Tea, with a little Landa-
-num — Mutton Broth &c — Cold water is recom-
-mended to be given in Clysters — I should not
be afraid of injecting Cold Water, into the Rectum,
whether there was Inflammation, or not —
Dr Rose used Aqua Gelida, in Italy with Suc-
-cess — It is used with Advantage in Cholic
and if it is serviceable in that Disease; cer-
-tainly it must be so in Dysentary — —
5th — Opiates, they should be given every Night,
and sometimes in the Day — —
6th — Diluents, as Whey, Flaxseed Tea, Cham-
-omile, Mallows, & Mullen, Teas; and
Barley Water — Cold Water is used sometimes,
when there is too much Action, in the System,
Dr Huxham, says poor People used Cold
Water with Succes — — — —
7th — Demulcents — as the White Decoction,
prepared by Boiling Gum Arabic, or Sha-
-vings of Hartshorn with Spices — a Decoction
of Mullen which is a good Demulcent —

On perporming these things as speedily as possible — The Indication is to bleed
if it can be done with safety, & repeat it as the symtoms Authorise —

Mutton Suet Boiled in Milk — this when drank has cured the Dysentary — common Blackberry Root Tea, which is a good Astringent, and Demulcent. — Dr. Buchan recommends the following — Take a few handfulls of fine Flour; tie it in a Napkin and Boil it in a Pot, for Six or Seven hours, till it becomes, as hard as Starch: afterwards grate it, and make a Gruel of it — This is a very Astringent, and Demulcent — When the Disease has continued some time; then Cordial Drinks are of Service — as Port, Madaira, or Cherry wines — Broths are proper in the Close of this Disease — the less Animal Food the patient takes in the Begining of this Disease, the better — If the above Remedies fail, after the 5th day, recourse must be had to Blisters, particularly in the Febris Introversa of Dr. Sydenham; they should be applied to the Bowels, or Extremeties — The Bark is proper when there is a Remission in the Morning; or Intermission of the Fever every other day — or when Putrid Diathesis, and great Debility is present — — —

To prevent Reinfection, or a Reproduction of it, we should keep the patients Room very Clean, after the Pot has been used it should be removed Immediately. Dissections show Inflammator to be seated chiefly in the lower Bowels — Sr. John Pringle says, the Cure of this Disease, is the same in all Climates — He found the Combination of this Disease, with the Typhus,

Limeman's Rx. Ziij Barley boiled in an ounce of Cream Tart. in 2½ pints of water till the Barley burst then strain — to be drank warm during the first day — 2d day ℥2 or 3 — A Tamarind at night —

— After bleeding a vomit of Ipecacuanha ii to 3ss given ℈ which commonly relieves the Stomach from a load of acid pituitous bile — An Opiate after its Operation is necessary — — — first ordering the patient's Head.

to be generally Fatal --- A Tenesmus when trouble-some is sometimes, accompanied with a Strangury, this is cured by Opium - - - A Sunk Countenance Restlessness, Intermitting Pulse, Hiccup, and sudden ceasing of Pain, Sore throat, Cadaverous Stools, & Squeaking Voice - are all very dangerous and Fatal Symtoms - - - I scarcely ever knew a Patient to recover, who had a Squeaking Voice, or Sore throat - - - A troublesome Diarrhea, is frequently the consequence of this Disorder, - - Its remedies are, Port wine Clysters, a Generous Diet and Gentle Exercise - - - The Clysters, should be made with ℥ij of Ipecacuanha, ℥x ℔ss of Laud - and a Decoction of Rice ℔ss - - this kind of Clyster, has produced great effects - When worms attend, Callomel should be given; - - I once saw a Case, where Paly of the Arms succeeded this Disease - the common Remedies for Paly, are then to be used, if it should happen - - ———

Dysentricula.

This Kind Dysentery is often troublesome, but the Patient is not confined to the Bed - Its Remedies are Blisters and Bark - Are there any means of preventing Dysentery? - In confirmation of an Opinion that there may be - I shall relate the following Facts - - - - The Company of a Militia Captain during the Late War, was attacked with the Dysentery - -

After the vomit & opiate it is proper to empty the bowels, but with caution in case the patient be weak & in such a manner as not to increase the determination of the blood there, & divert it from the surface - - - -

the Capt. had been told, or it occurr'd to him, that if he gave those of his Men, who were not attacked with the Disease; a Gentle Purge, — as of Salts &c — he should prevent their taking it — he did so — & every Man that took a Purge, escaped the Disease. — he likewise mentioned to the Doct. that within these 9 Years; the Dysentery had prevail'd in his Neighbourhood — Accordingly he had recourse to the same preventative and with the like Success — (The Butternut Pill was recommended, when Salts could not be procured) I shall here mention a few Facts relative to this Disease. — — —

The first fact, I had from Doct. Clarkson. — who saw it terminate suddenly in a Spontaneous Salivation — this favours the Febris Introversa of Dr. Sydenham — — — — —

The second fact is, that it terminated in an Inflammatory Opthalmia; and Rheumatism — The Opthalmia was cured; but the Rheumatism continues in some degree. —

It is remarkable that tho the Disease Pulse during the Dysentery was so low, as hardly to be felt — Yet after the Rheumatism had seized — it rose so high as to make Bleeding necessary — — which was done with advantage — — — — — — — — —

Mercury & Nitrous Antimonial, finely levigated, is equal to the Vit. Cerat. Antimonial, one Grain in a Pill &c. to be given when the Patient is warm in bed — small doses of Laudanum may be given without inconvenience when the Patient is sweating.

The Prima via being cleansed & the revulsion begun it must be supported by sudorifics. Laudanum & antimonial wine the best & easiest when the Diaphoresis is begun the patient is to be supplied with warm Barley water, Mint, Sage, Balm or Oatmeal tea, & now & then give a bason of gruel, or pap with a spoonfull or two of good wine in it —
When this method is successfull the symtoms abate, & if the Patient breaks out in a rash or efflorescence or boils or Eruptions the disease will soon be removed —

Lecture 15th

Intermittent Fevers.

These are Fevers consisting of different Paroxysms, returning generally with Chills --- generally I say, because they are sometimes destitute of them --- and then they are called the dumb Ague ---

The time of accession is different, and hence, a difference in the Type, and Appellation of Intermittents, as the Quotidian, Tertian, & Quartan.

The Quotidian comes on every day, & is finished at last in 24 hours --- The Tertian observes a period of 48 hours --- and the Quartan one of 72 Hours --- These Intermitting Fevers are of great Variety --- in the Quotidian we sometimes observe two paroxysms, every day - and it varies also by the length of the Paroxysms - ---

The Tertian may have one fit only, in 48 hours, differing ~~only~~ however; in the length of the paroxysm, it is still said to be a tertian, if the fit occurs every day, but with a more Violent Exacerbation at the Tertian period --- Tertians may come on, every day, but with two Paroxysms on the proper Day --- it may come on every other day; only having two fits on that day - A single quartan is, when there is one fit, at the Quartan Period; and none on the other two days --- it may be varied --- 1st --- By having two fits on the Quartan Day, and none on the others - ---

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It is produced by a specific poison or Contagion arising from stagnant waters ---

these circumstances need not alter our method of cure

2d By having only the Quartan Day free from Fever. — 3d By having three Paroxysms, on the Quartan period Day, and none on the intermediate Days — 4th By daily Exacerbations, attended with similar Paroxysms every Quartan Day — 5th Quartans like the others may be more, or less continued — The Quotidian, is varied by affecting the whole System, or a part of it — but it arises from the same cause — The less the excess of Irregular Action — the more the Intermission is — In quartans there is less Action than in Tertians; and in Tertians less than in Quotidians &c — The old & weakly people, are most liable to the Quartan — the length of Time from the beginning, of one paroxysm, to the Beginning of another is called an Interval, The Length of Time from the End of one Paroxysm, to the Beginning of another is called an Intermission. — What is the difference between an Intermittent Fever and Typhus — In the one there is great Excitability — and in the other less — It is a Question of difficult Solution What gives rise to the recurrence of Paroxysms — Dr Cullen says it is owing to Habit: and Diurnal Influence, — he gives many instances to prove that the Human Body is subject to certain Changes, whither arising from Habit, or an Original Law, to which the Body at its first formation, was Subject — as we are by

This disease operates many times by inducing local affection or at least agravating those already induced — —

When the Paroxysm returns sooner than its stated times it is a sign that it is acquiring strength & hastining to a continued Fever

Vide Versa Senac /.

Habit determined to Sleep, at a particular Hour; as well as to wake at Regular Stated Times — and likewise, to have our Excretions increased; and promoted Periodically — But we neither see the Cause why the recurrence of Paroxysms, should be so determined: nor even why habit should have this Effect, and the Manner in which the Body is affected — Dr. Brown ascribes the return of Paroxysms to Debility — but he is wrong; for we cannot see how Debility, determines Fevers, to return regularly — because the Greater the Debility; the less frequent are the Paroxysms — I will here throw out a Conjecture of mine — May not an Association of Ideas, account for the Recurrence of Paroxysms — I have a Fact from Dr. Percival of a Woman in Palsy &c —

That a single thought, or Impression, will bring on a Disease is certain — for example, a Person Poisoned, will sometimes vomit, the next day, when he thinks of it — It is so — The Subject is as yet involv'd in great Difficulty — Intermittents are sometimes combined with other Diseases — as Coma, Apoplexy, Cholera Morbus — Periodical Pains, as Tooth-Ach, Pains in the Eyes and other parts.# — For the History of this Disease I refer you to Dr. Cullen —

i.e. Masked Intermittents

Cure.

The Cure of Intermittent Fevers, divides itself, into two parts —

1st — To moderate the excess of Action in the Fits — or conduct each Fit favourably. — —

2d To prevent the Return of them — But to answer the first Indication, we must be certain that the Disease is an Intermittent. — for this purpose, I shall lay down the following Remarks — —

1st — We know an Intermittent Fever, from its occurring, in the Autumnal Months — which at that Time generally prevails —

2d — From the long duration of the Cold Fit, which seldom takes place in Continued, or other Fevers — —

3d — From the Copious Discharge of Bile, which may be known by the Matter vomited up, being of a Green, or Yellow Colour — and the Patient Complaining of a Bitter Taste — — — —

4th From its attacking in the Morning, chiefly — Patients in the Time of the Paroxysms, are very much the objects of Medicine —

Miasmata sometimes act like Lightning, and by Great Excitement produce Death — Some say Mortality owns in the Cold Fit, of Intermittents — Dr Lind denies it, and Dr Rush likewise does not believe that Death,

Cure depends upon destroying the catenation between
of Irregular action

Vernal Intermittents more easily cured than Autumnal the poison seems not so malignant in the Vernal &c.

occurs in the Cold Fit - - - In every Fit there is great Debility in the Stomach - and hence Vomiting often ensues - - Its Remedies are -

1 - The Stimulus of Heat - as going into a warm Bed - making use of warm Drinks, as Punch, Chamomile Tea &c - 2d Opium - -

The Second Indication is to prevent the return of the Paroxysms - this may be Divided into two Heads - -

1st - The palliative Remedies, which do not affect a Certain Cure - - -

2 - - The Radical Remedies, which do not allow them to Return without the fresh application of Miasmata, or other Remote Causes -

I - - The Palliative Remedies are - 1st Opium.

It is well known that a large dose of Opium given just before the Time of accession; (when this can be certainly known) commonly puts an End off the Paroxysms which otherwise would have occured - - Six drops of Laudanum may be given every hour, for Six hours before the accession; - or ten drops every hour for three hours, before the Accession of the Fit - - here the Stomach is in an exact Ratio to the degree of Debility prevailing - - - -

2d - I have been told, that Stramonium, applied to the Ancles, has Succeded in keeping

When there is signs of congestion which is frequent in Inflammation combind with Tetter should be prescribed

Exhibit warmth is one of the best remedies to prevent cold
110. paroxysms —

off the Fit — I have seen Tobacco, do the same, in this City —

3d — Aromatics, of various kinds have been employed for this purpose, with Success — particularly a large doses of Nutmeg — so also has the Black Pepper mixed with vinegar —

4th — Tonics, consisting of Bitters, and Astringents, as Dogwood — Bark of the Poplar, Columbo root, Gentian, Centaury — Chammomile, wormseed — and a Dose of Allum given in the Quantity, of ℥ss at a Dose — — —

5th — The Juice of a Spider, or web — the Spider must be put into a Piece of Dough, and Baked before the Fire — like a Dumplin — the Spider, afterwards must be thrown away — and then the Dough, may be made into Pills — This given in an Intermission has succeeded, when the Bark did not — I suppose if it does cure it acts as a gentle Stimulus — The live Spider is sometimes placed in a Thimble covered with Gauze, and in this situation, hung round the Neck; so as to be against the Pit of the Stomach — There is a Family, in this City, in which, it is, a Nostrum, in the Web — and this last application of the Spider, perhaps, Fancy had more effect in producing Cures; than any intrinsic virtue in them — But some facts,

These are both Tonic & Stimulant; ℞ Quassia ℈ ℔. Cloves ℊ v. Alum ℊ v. — This is an

seem to prove that there is a virtue of some kind in the Spider --- the Large Black Spider, is generally known, from the venomous Nature of its Bite --- case in which a Lady of my Acquaintance, sent a Maid to the Milk House, for a Pan of Milk -- When she brought it - a large Spider was found in it - the Lady did not like to use it for the Family -- but unwilling that it should be lost -- ordered it to be given to several Calves -- 2, or 3 of which Died ---

How does the Bite of the Tarantula cure it? -- By the Persons rising to Dance, thro the powerfull influence of Music -- which gives Tone to the System -- this is used in Italy -- 6th -- Sweating before the Fire - and Drinking some Spirituous Liquor at the same time --- 7th -- Riding on Horseback just before the Accession -- 8th -- Terror has prevented it --- 9th -- ~~Cold Bathing~~ -- 10th -- ~~Lightning~~, case of a Patient of mine, who shortly before the Time, when the Fit, was to come on -- was sitting by a Fire, on which he threw some Shavings -- the sudden Blaze which they gave, set the Chimney on Fire -- this Accident Terrified him so much -- the Fit was passed by - and he never had a return of the Fever.

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excellent tonic after the system is reduced in Intermittent fever ---

9th Cold Bathing - -

10th Lightning - When I was in Edinburgh, the Infirmary was struck with Lightning, while Dr - - - - was prescribing, the Dr himself was Slightly affected; and so were all the Patients, the Patient the Dr was prescribing for; had an Intermittent Fever; and was so particularly affected, as never to have a return of the Disease - The above Remedies do not Eradicate the Disease - - We come now to Speak of - -

II - The Radical Remedies - which is always to be attempted in preference to the other - these are - - -

1st - - The Peruvian Bark - - this consist of a Bitter and astringent property - - - -

Dr Brown, denies the utility of Bark - but Dr Rush, thinks that Brown, never had any opportunity of administering the Bark - therefore his Observations, with respect to Bark; are Absurd - First Bark should be given in large Doses, from ℥ss to ℥ss - just before the Accession of a Fit - Dr Home says it is best when administer'd after the Fit - he says it ought to stay a long time in the Stomach. both ways are Good - I generally give it during the Intermission - - - - -

2d Bark should be given in Substance - but many

In cases where the utility of the bark was in the least degree equivocal and where a reasonable quantity has been taken without success, the

Stomache from certain Causes, cannot retain it — in this form; in which Case, some have advised, Huxhams Tincture, but this should be given, only as a restorative — for the quantity of Spirits, it contains, renders it a dangerous, and improper Medicine in the Cure of this Disease — If the Bark purges, it may be prevented, by mixing a few drops of Laudanum, with each dose — If it causes costiveness, a little Rhenbarb should be given with it, After the Bark has cured the Disease — it is apt to return, about the 8th or 14th Day — but a large Dose of the Bark given at that Time; will generally prevent it; There are two kinds of Bark 1st The Yellow Bark, 2d The Red Bark — The Red Bark was at its first Introduction, much recommended; as Superior to the Yellow Bark — but the high price it bears renders it subject to adulteration, and as it is to be met with, in this State in the Shops — it is not to be prefered to the common Bark — the Red Bark is Stronger, than the Common Yellow Bark — but lately we have Recev'd a Yellow Bark, which is Stronger than either of the other two — It is sometimes difficult to make Children take the Bark; we must then make use of a Bath, made with an Infusion of Bark &c — this gives Tone, to the extreme Vessels, which is communicated, over the Whole System — It sometimes happens,

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following method is to be pursued — Order the Patient to bed & give him a Vomit at first, about 2 hours before the accession, & after its operation a warm Opiate to promote perspiration with proper dilution — next —

that the Bark fails in curing this Disease — when this does happen Dr. Blane, in his Observations on Diseases of Seamen, recommends the Lime, for a Cure — but Dr. Rush having had no experience of its virtues in this way; will not recomend it — but thinks, when Inflammatory Action prevails: Lime may be better than Bark — If all these fail, we must have recourse to Blisters — when these do not Succeed — and Intermittents are protracted, to the Late Fall or Winter Months; we must use Bloodletting — it has Succeeded where Pounds of Bark, have been used to no purpose — it never failed me — it has Succeeded in the Quartan, as well as Tertian — Once has, mostly, proved Sufficient, — but I have been forced to repeat it Sometimes — — In this City, when the Disease has Continued after Christmas, he finds no hesitation in Bleeding — the Blood in these cases is Sizy — —

If Bloodletting fails we must have recourse, to Mercury — I have used Mercury with Success — Dr. Thomas Bond, used this Remedy with Success — with advantage In this Disease; Mercury opens Obstructions, and gives Tone to the System — After Mercury has been used — it must be succeeded by a Generous Diet — If Mercury should fail — a Change of Air has often Succeeded — this has been known to prove effectual in the Case of a Gentleman,

Next morning, give a dose of Rhubarb & Magnesia, & a few grains of Calomel every night, for 2 or 3 successive nights — If the skin & Eyes were tinged

who lived in George Town, in Maryland; who caught the Fever, and Ague, which continued with him, during his residence at New castle, whuche removed: and ~~what~~ which is likewise a Marshy country — but what in two years he removed to Dauphin County in this State: where, (by the Change of Air) in a little Time; he obtained his health, entirely — Vernal Intermittents, do not differ materially, from the Autumnal as to the Cure. but that the former admits of Blood letting, and Purging more freely — — —

It has been supposed, that vomits were necessary to prepare the Stomach, for the Bark; but they are probably unnecessary, and perhaps injurious; by increasing Debility — they are recommended to discharge an Unusual Quantity of Bile, — then present — but this Dr. Rush conceives, to be best done by mild Cathartics — perhaps in the very begining of the Disease — or when the Patient is troubled with Nausea, they may be proper; they should always be used before the Fever is formed —

Intermittent Fevers, often conceal themselves under the form of other Diseases — and then make, what Dr. Senac calls. Febris Intermittens, sub forma levavator. This Disease comes on sometimes under the form — 1st Of Coma, & Apoplexy — Dr. Rush had a patient in an Apoplexy — the Paroxysm of which was Cured — the next day,

with bile, or the Patient Costive, give a small dose of Rhei & Magnesia on the following Mornings; otherwise not — Moseley —

it returned at the same Hour, and he thinks it was a case of Febris Intermittens Subforma adevator — these kinds of Apoplexys yeild but Blisters & Bark — —

2d - Under the form of Convulsions in Children, which are cured by Laudanum and Bark —

3d - Under the form of Inflammatory Con= =gestions — this yeilds to Bleeding — — —

4th Cholera &c —

5th Headach — this yields to Blisters, Bark, or Bleeding

6th When the Disease is concealed, under the form of Pain in the Under Jaws, Hips &c — Its Rem= =edies are, Bark &c —

An Efflorescence on the Skin frequently attends Intermittents — but it requires no particular treatment — It generally yeilds to the Remedies employed to cure the primary Disease — — — This Disease renders the Constitu= =tion obnoxious to several others — as the Dropsy — Jaundice, Costiveness, Consumption, Obstruc= =tions in the Spleen &c — — The Bark has been accused of the Mischief — but improperly — because they are less frequent since the Bark has been so generally used than before — —

To remove these Obstructions Dr Boerhaave recommends Myrrh — but Callomel is certainly much better — —

Swelling in the Legs is a Good Sign in Adults —

and Swelling of the Body in Children; is likewise a Good Sign ——
Restoratives in the Convalescent State, are certainly proper — but Purging which many recommend, is very injurious ——
Dr. H —— recommends Cold Bathing ——
should we employ Intermittent Fever to cure Mania. Epilepsy &c — If we could regulate them I think we might ——
After Sickness a flannel Jacket worn next the Skin, Morely prevents relapses —

Lecture 16th.

Prognosis ——

Before we proceed to the Prognosis of Fevers; we must say something of Critical Days ——
This was once an important branch, of in the Science of Medicine — when it was confined entirely to the hands of the Priests — who threw a veil of Mystery over every thing — but since these two Professions, have been Separated, the Doctrine has been much neglected ——
There are Fashions, in Medicine; as well as in Dress — and various Opinions have been at one time, Supported; and at another neglected. this has been the case with Critical Days — which was generally believed, and established, by all Physicians, ever since the Time of Hypocrates — 'till Dr. Brown rose, & made War,

against it -- merely because Dr Cullen, espoused the Doctrine -- he treated it with Ridicule. ——

The foundation of these Days: was laid down by Hypocrates. -- It is to be remarked, that in the Mild, Temperate Climate of Greece, in which Hyppocrates Lived -- was favourable to those opperations of Nature -- which seem in many Instances, to take place at Stated Periods; and which might have rendered them more Observable by Hyppocrates -- It is difficult in the present State of Society, to form any regular System, with respect to the termination of Fevers ——

In London, and Edinburgh, the Typhus Mitior, of Dr Cullen; is the only Fever; & is without any Critical Days. If Luxury and Debauchery, in those places, have Counteracted Nature, in other respects -- may we not suppose, that they have turned her out of her Course, in the Observance of Critical Days? ——

But the Case is not quite so in America, --

Our Manners, and Habits, are not so far removed from a State of Nature; as is the Case in many parts of Europe -- which appears, by our having Intermittents, more prevalent here than most other Diseases -- and consequently we have a better Chance, of having Critical Days: than the Europeans have. — — — ——

Dr Cullen supposes the Intermittent Fever to be the only Original Type of Fever: and that all Fevers partake of this Type — Of Intermittent Fevers; the only Natural Forms, are Tertians & Quartans — the Quotidian, as partaking more of the Nature of Typhus are less Natural — The Critical days are, the 3d — 5th — 7th — 9th — 11th — 14th — 17th — 20th — and 21st —

In Conformity to this Law of Nature: Hyppocrates, supposes, that all Fevers, in some measure, partake of the Type of Tertians & Quartans: and hence the Critical Days, that he has pointed out, are the 3d — and all the Tertian Periods are the following (i.e.,) 5th — 7th 9th & 11th — after which from a Law of Nature which we cannot explain — as Debility advances, they assume the Quartan Type: and the Critical Days following the 11th — are the 14th — 17th — and 20th — These Critical Days are far from being always Regular — for Crises do happen on non Critical days — they have occurred in the Time of Hyppocrates — but more especially at this present Time: as the Powerfull Remedies, made use of, in the present Mode of Practice — may frequently destroy the Critical Days — I have distinctly observed the 5th — 9th & 11th — to be Critical Days — But I have seen several Thousands of Fevers, without observing any Periodical Crisis —

Dr Sydenham makes some Observations, on the Natural duration of Intermittents - but he supposes the Natural Duration of a Fever, to be 336 Hours - a Quartan he supposes to continue Six Months, and a Continued Fever, 14 days - but this Doctrine is not confirmed by Facts, and consequently must remain, as a mere Hypothesis - - - -

Dr Balfour (of Bengall) rejects the Supposition of Critical Days; but allowes of Critical periods - which he says are regulated & influenced by the Moon - - When we consider the many and wonderfull effects of the Moon, in other parts, of the Kingdoms of Nature - it will not appear, so strange, that she should also have some influence in Diseases - - - -

1st - It is universally allowed that the Moon, is the cause of the Tides - - - -

2d - It is probably has an influence upon Agriculture and Vegetation, - the Germans are remarkable for observing to Sow & Plant, all their Grain &c at particular periods of the Moon - and it may be owing to this attention, that they always Succeed better than others in Agriculture and Horticulture - - -

3d - The Influence of this Planet, is likewise extended to the Weather - - - - -

4th. It dishoses Meat to Putrify - - It is said,

by the Fishermen in this Country — that Fish — exposed to the Light of the Moon putrifies sooner than otherwise ——

5th — It is generally known that the Moon has certain effects upon particular Maniacs. hence they are called Lunatics; and we have probable proofs; that particular periods of the Moon, agravate the Symtoms arising from Worms in Children —— It seems to affect Persons even in Health — the Celebrated Lord Bacon was observed always to faint, during a Lunar Eclipse — this might be supposed to be owing to the effects of Imagination, or to a reflex Power; but it is asserted, that the same thing happened when he did not recollect that the Time of the Eclipse was at hand ——

Sulley, in his Memoirs informs us, that the Learned Theodore Beza, actually Died at an Eclipse of the Moon ——

6th — Balfour, asserts that the State and Quantity of the Bile is influenced by the Moon ——

Oliver Cromwell &c —

Balfour says that all Fevers attack the Patient, three Days before the full of the Moon; or three days after the full — or three days before the Change of the Moon — or three Days afterwards — and upon these principles he governed his Practice — he used to give more powerfull

Prognosis from Symtoms &c

I Of the pulse — A thrilling vibrating pulse is a sure indication of membranous affection particularly when attended with a red glazy tongue. The cure depends

II. A corded slow pulse & dilated pupils indicate compression of the brain in Children are a sure signs of Convulsions —

III. &

Appearances of the Eye in some diseases shews the affections of the system —

I. A pointed eye with quick pulse shows great action in the brain —

II. A loaded eye & tinged with yellow indicates the malignant fever of our country & a person who has seen a few cases cannot mistake it —

Of the Tongue —

A red & dry tongue indicates Erysipelas — & membranous affection or inflammation The dry & dark tongue indicates debility & commonly of the indirect kind —

Of Deafnes — Deafnes in the commencement of fever is a bad symtom — it denotes compression of the brain — but is a good symtom after fever has continued some time —

Of Sleep or Coma —

Coma at the commencement of fever is a bad symtom — this is particularly the case in the Plague in Egypt — it shews an exhaustion of the sensorial powers —

Wakefullnes —

Wakefullnes after exposure to disease, where Epidemics prevail is a sign of the disease

Remedies, before these Times: than afterwards ——
If it happened that a Fever, ocurred in the Intermission — he gave the Bark more Speedily before the expiration of the Six days — and by these Means, was able to prevent a Relapse. and following these Principles closely, he could mostly Predict the Event — he always observed his Patients to be worse at the Full, and Change, of the Moon — the same influence extends to over the Whole Nothern Hemisphere — It extends to the Eruption of the Small Pox ——
1st — Curing Fevers &c 2d — Against Relapses &c — 3d Predictions &c
I shall here make two Remarks ——
1st — The Universal Consent of all Mankind; appear to enforce it ——
2d — There is no Error that has not a Shadow of Truth The Uses of Critical Days — From them, we learn to give the Bark, on those Days, which are neither Tertian, nor Quartan — and on the Tertian Day to Evacuate if the Excitement is too Great ———

Prognosis from Symtoms.

In delivering the Prognosis of Fevers from the Symtoms; I shall give you my own Observations — We shall consider ——
1st — The Pulse — Many kinds of Pulses, have been mentioned as the Undulatory — Oscillatory, Vermicular &c — but there is no foundation, for Beleiving them ——

The Pulse in Old People — Children, & Patients, just before their Death, frequently deceives us — The full, the weak, the Hard, the Soft, the Slow, the Intermitting Pulse, and Small Pulse, are all fallacious as to the Issue of the Disease — the Intermitting Pulse, is not always followed by Death — It sometimes occurs in Persons, in Good Health — the Slow Pulse indicates an affection of the Brain, and is always Alarming —

The Pulse in Children varies from 130, to 140 Strokes in a minute, at their Birth — for the first Year of their Age from 100, to 120, for the Second Year from 90, to 100, for the third Year, from 80 to 90, during the 4th — 5th — and 6th Years the Pulse is the Same — In the Seventh Year it is 72 — In the Twelvth Year, it is the same as in Adults — from 70 to 80 —

The Pulse in Children is more easily quickened by Stimuli than in Adults — a full Meal increases the Pulse, twelve Strokes in a minute — The Pulse in Children ought always to be felt, when they are asleep — Whenever the Pulse is above 140 in a Minute Death is near at hand — In the Jail Fever, it is generally Fatal above 120 — In Asthma, it is likewise dangerous above 120 — Dr Heberden says a Case, of Recovery at 180 — A quick pulse tho full, and even Hard is always alarming — Bleeding here should be cautiously used — A Pulse between 60 and 70, except in Old People — is Bad — ——

Sometimes the Pulse is only at 42 – 30, and in some instances as low as 26 – which is very Dangerous – The principle use of the Pulse, is to distinguish the different Stages of the same Disease &c ——

II. The Position of the Patient – When the Patient can lay equally as well, on either Side, it is a favourable Circumstance – but when he can lay only on one Side, or on neither Side – but only on his Back – when he cannot support himself in the Bed, without holding up his Knees – or when the Body will still be slipping to the bottom of the Bed – it indicates a very Alarming, and dangerous Situation –

III. The Voice – A quick and Sharp Voice, is alarming if not natural – Hiccup is generally unfavourable – a drawling Voice, is generally a favourable Symtom – – ——

IV. The Senses – When the Patient keeps his Eyes half closed; unless it should happen in a Diarrhea &c – is a bad Symtom – When one Eye appears larger than the other – when the White of the Eye, becomes red; when there is a want of Motion, in them, also an Involuntary flow of Tears – An insensibility to Light – False vision – catching at Motes – and picking at the bed Clothes, arising in part from a Delirium – defect of winking – Glasiness of the Eyes, in consequence of being kept open, and Mistiness before the Eyes – are all, to be reckoned among the unfavourable Prognostics –

Blindness has mostly proved Fatal —
Tinnitus Aurium, is an unfavourable Symtom —
Deafness is doubtfull — it is both Good, and Bad —
An insensibility to Cold, Burns, or Blisters, is
alarming — An Indistinct Speech is bad. —
A Trembling of the Tongue is unfavourable —
it portends Delirium — the darker and drier
the Tongue is, the more dangerous is the Situation
of the Patient — But we must beware however,
of being led into a Mistake, concerning this
Dryness — for it often occurs in persons, in Good
health — from Sleeping with the Mouth open —
and hence it would be proper to enquire, whether
he just awoke from Sleep — if he had not been
a Sleep, we may be certain it indicates Danger —
The more the Tongue recedes from a White
Colour the more the Danger — A return of
Taste, is a favourable Symtom particularly
for Coffee, and Tobacco — In the Convalescent State
of Fevers, the moisture begins first from the Edges,
and next from the Tip of the Tongue, & then gradually
Spreads — the Dark Colour sometimes continues
upon the Tongue for 4 or 5 days after the Crisis —
certain Drinks give the Tongue a Black Colour.
Yellow Colour the Tongue — a Smearing on the tip,
or middle Line of it — denotes a Remission —
Viscid Humours adhering to the Teeth — Gnashing
of the Teeth — Falling of the Jaws — Sore throat
&c — are bad Symtoms. —

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V. The Extremeties — Tremors — Subsultus Tendinum, and Coldness on the Wrists; are unfavourable Symtoms — the coldness of Death, always appears on the Wrists first — this Seldom deceives me — a redness of the hands, and Feet, are said to be fatal — but I do not know any thing of this. a coldness of the Elbows, and Knees, are Generally fatal — I knew but instance of a Recovery — a Chilly Fit in the advanced Stage of a Slow Fever, is always favourable — and is one of the most certain Signs of a Crisis — —

VI. The Excretions — Pale Urine, indicates Debility and is bad — Dark Urine is worse — & Bloody Urine is certainly more dangerous, & Alarming. When a Cloud appears in the Urine, it is supposed to be favourable — but still better if a Sediment is formed — it marks an increase of Tone, in the Excretories — But Diseases often terminate, without a Sediment in the Urine — consequently Symtoms, taken from the Urine are ~~favourable~~ fallacious. Hyppocrates derived many of his Prognostics from Stools: a Natural Smell — Consistence, and Colour are good — every deviation from the Natural Colour is bad — the Green Stools, denote an excess of Bile — mixed with Acidity — the dark Coloured, or Black Stools shew that the Bile is mixed with Putrid, or Alkalescent Matters — the White Stools indicate a Deficiency of Bile — a Natural Stool once in a day, without the Aid of Medicine, is a

favourable Sign — a sure mark of returning health, a Command over the Sphincter Ani; or Crepitus Ventri, is a favourable Symtom; Involuntary Stools and a quick discharge, are dangerous — A discharge of Worms in the Stools about the Crisis, is favourable —

Lecture, 17th —

We now go on with the Subject of Prognostics — Sweats — when profuse and partial, as on the Forehead, or Breast only — especially when accompanied with Debility, are bad Symtoms — they are always to be checked as much as possible, with Prudence — this we conceive may most safely be done, by getting the Patient out of Bed, when the State of his Disease will permit it — and Changing his Body Linen — or wiping his Body, with Woolen Cloaths — and wrapping him in Flannel — When a General Sweat or Moisture appears on the Skin — and continues for 24 hours — it may in general, be allowed a good Symtom — especially if they happen on one of the Critical Days mentioned — If those Sweats have a Putrid Smell, and Taste, they may be dreaded as dangerous presages — Dr Rush mentions an instance, of a Nurse, in the Pensylvania Hospital, who foretold the death of a Patient, under her Care; by observing that his Sweat, both Smelled and Tasted Putrid — Abcesses appearing in the Groin, or Throat, in the begining, especially of Jail, or Hospital Fever, are Salutary — but Fatal in the Close —

Partial Mortification, if it appears early in the Disease, is favourable — It is observable, that in almost all Diseases — especially in febrile Diseases — that Old Sores, and Issues, are always dried up — but when these run again, we may expect a Solution of the Disease — It is very proper to ask our Patients, if they have such Issues &c — and to examine them frequently, in order to assist in forming our own Prognostics — If Blisters, which have been applied in the course of the Disease heal, and then break out again — it may be esteem'd a favourable Sign — A Priapism, appearing in Fevers, is always a good Symtom. —

Hemorrhages — are unfavourable Prognostics, in the close of all Fevers — but they are less frequent especially in Inflamatory Diseases — since Bleeding has been so much used — They are more dangerous when from the Kidneys — or Anus — which we may know from the Bloody Urine, and Stools —

A Sweating, or Spitting is favourable — The Countenance will assist in forming a Prognostic — The Facies Hypocratica, is bad — but patients in Cholera Morbus, often have that Countenance and yet recover — It consists in hollow Eyes, Emaciation and a Resemblance to our Ancestors — A Sullen Look, with the Natural Colour in the Face, is a bad Sign — this sometimes occurs in the Hydrocephalus Internus. The State of the Mind — A silent Delirium is always bad — and worse than that which is accompanied with Cheerfulness — A firmness, or Good Temper

of Mind, in the begining, is always favourable— An Irritable Temper again is remarked to be a Good Sign in the close of Diseases — Asking for things contrary to habit is bad — A disposition to Wit is Good — Breathing alternately quick, and Slow, is an unfavourable Symtom — cold Breath — and that peculiar Noise, called the Rattles, is generally fatal — A Noise in Swallowing is very unfavourable — Sneezing, is a favourable Symtom — Sleep in the Night, or Morning is a good Sign — especially if accompanied with a Moist Skin — it generally approaches before the Crisis — The return of Appetite is good — especially for Artificial Articles &c as Coffee, Tobacco &c — but when the Appetite is craving after unusual Food, it is bad — The return of Sleep and Appetite, is the most unequivocal Sign of a Crisis — in Diseases, and of returning Health — After all no one Sign is certain — Thousands of instances occur, where Patients recover from the worst of Symtoms; and others die, without any Dangerous Symtoms occurring — I have seen a Recovery, from not only a Low Pulse — but an Absence of the Pulse for 36 Hours — and I have seen likewise a Recovery of a Person from Typhus, who could not See, hear, or feel, on account of the extreme Debility — thro' the Aid of Clysters of Madeira Wine, Bark, and Opium: Let us learn two Things from the above Facts — (viz.)

1st A Physician should never prognosticate the Event; or promise the Cure of any disease, especially of the Acute —

2d A Physician should never give a Patient over in a Fever —

Inflammatory Diseases—

Pneumonia

The further we advance in the knowledge of Diseases—the more we shall be convinced that all of them depend upon predisposing debility.—— this predisponent Debility, manifestly occurs in Pneumonia hence this Disease most commonly affects Habits that are weak ——

This Disease is produced both by Direct & Indirect Debility.—— The causes producing Indirect Debility are—1st—Labour, Fatigue &c——

2d—Excess in Eating, and Drinking.——

The causes producing Direct Debility are, Cold, Particularly, (Case of the French Gentlemen, who went towards the North Pole, to measure a Degree of Latitude; when in the Air, all complained of a Stric=ture in the Breast—which allowed them to Breath—

The Pain we feel in Breathing cold Air, in this Disease, is owing to its debilitating Action, on the Lungs.—Cold produces its effects prima=rily, on the External parts of the Body—the Lung and Throat—which I consider as External parts—when the Body is debilitated by Cold previously—the Disease is then brought on by most commonly, by the application of some Stimulating power—which is generally Heat,—as the Lungs are in the most Excitable Condition—and partake most of Debility from that principle, they are soonest excited into Act=

The above is proved--
1st From Pneumonia occurring only when there is an alternation of Warm and Cold Weather - and its appearing in Spring. 2d From Pneumonia being scarcely known in Countries that have uniformly Cold Weather - as in Sweden, and Russia - --
3 - From its appearing in those Persons who have been exposed to the Air, in a warm Room - or have Slept in a warm Bed - After the application of the Sedative power of Cold --
The Term of Catching Cold is very improper, but it should rather be called Catching Heat -
The Pneumonia is a Disease of the Whole System, and the Lungs are affected in a Secondary Manner - that this is the Case I infer, from the Disease not appearing for several Days after the Pulse is raised --
Formerly a difference was made, between Peripneumonia, and Pleurisy - but this distinction is erroneous -- as they appear to be the same -- Dr Cullen has mentioned, two Species of this Disease - but it is quite unnecessary - - the pain when in the Breast is Obtuse -- in the Side it is Acute - --
Respiration is difficult, attended with a Cough, which is dry in the Begining, but afterwards Moist; and frequently Bloody - the Pulse is sometimes Small and Soft -- the Fever is generally attended with excess of Action --

Cure.

Before we go to the cure of this Disease; we must divide it into three Species. viz.
Pneumonia vera. Notha, & Typhoides.
We proceed first to the cure of

Pneumonia vera

This Dr. Brown calls a Sthenic Disease. but this is erroneous, for it is as absurd, to distinguish Diseases into Sthenic, and Asthenic; as to distinguish the Years into Cold, and warm. for the same disease, is sometimes Sthenic, and sometimes Asthenic. as the Influenza.

The Syntoms of Peripneumonia vera. are, difficult Respiration. hard pulse, pungent pain in the Side, or Breast; accompanied with a Cough, dry in the begining. but afterwards Moist, and frequently Bloody.

The Remedies are, all those which were used for Inflammatory Fevers. except Cold. these are.
1st. Copious Bloodletting. Dr. Cullen recommends Blood to be taken from the Arm, of the affected Side. Venesection may be used on the 5th. 7th. 12th. or 14th. days. provided the Pulse is hard, and no Syntoms of Suppuration attend. it does not prevent Expectoration but rather promotes it. We should never be afraid of Bleeding too much in this Disorder. for the Life of your Patient, should be your first Object.
Dr. Rush mentions an Anecdote of Dr. Cullen, who was called to a person, in a Pleuritic Affection &c.

While Dr. Cullen was a young Man - soon after he had began to practice --- he was Physician, to a Gentleman, ill of Pneumonia - he had Bled the Patient plentifully at several Times - and he wished to repeat it - and considered it as essential to the Recovery of his Patient - he was afraid that should any Misfortune happen, and the Gentleman Die, it would be Fatal to his Reputation - the Family apprehended, so much the death of the Patient; that they asked Dr. Cullen if a Clergy: man might be sent for --- he consented — after his Arival, the Dr. related the Situation of affairs to him - he said that the Gentleman, might Die after a Repetition of the Bleeding - but that he certainly would - if it was not done - he took notice of his own Situation; and con: cluded with desiring the Clergyman, to endea: vour to get it done - telling him, that should the Man Die - tho it might be Fatal to himself, as a Physician - it would be no injury to the other as a Minister - the Clergyman promised to endeavour to bring it about - after the Dr. was gone - he went in to the Sick Man - "You are very ill" he says - but there seems no necessity for your Dying yet - we Clergymen are much among the Sick - these Physicians think they know every thing - but Old Women, & Clergymen, know many things - Come - I will be your Physi: cian for once; suppose you send for the Bleeder, without the Doctrs knowing it. & have a little more Blood taken away; I will answer for the Consequences —

the Gentleman consented - and in consequence of Bleeding recovered - the Clergyman afterwards gave Dr. Cullen the credit of the Cure - and this laid the Foundation of his future Eminence

Case of a German Physician, who consulted the Dr. while he was at York Town - the Physician had Bled the Patient three times - Dr. Rush by advised a fourth Bleeding - the German Doctr left him, protesting that he would have no hand in the Patients death - Dr. Rush bled him; and in one hour after the Patient felt much better and Recovered -

2d - Lenient Purges, and Clysters - - -

3d - Neutral Salts, with Antimonials, also Seneka Snake root should be used Combined with Liquorice - -

4th - Blisters - after Bleeding; these are proper in every Stage of the Disease - they should be appli to the part affected &c - Blisters in Local Inflam- mations, have been used with Succes, on the 3d or 4th day - they appear to act, somewhat Similar to Bleeding, by causing an evacuation from the part to which they are applied - In the close of the disease if there is great defect of Action - they are of advantage from their Stimulant powe

5th - Demulcent Drinks, as Barley water - Flax seed Tea, and Bran Tea -

6th - Warm Vapour received into the Lungs, from Simple Water - this Vapour should be used,

about the 5th day, when the Expectoration is most difficult - it acts by producing Expectoration, which is indispensibly necessary in this Disease -

6th - Volatile Alkali, should be used for the same Reason, as the Vapour; in assisting Expectoration - When the Pulmonic System is much debilitated, and Expectoration difficult - it should be used from 5 to 10 grains every 2 hours -

Dr Cullens Syrup - a half a Pint of Boiling Water poured upon two, or three Tea Spoonfulls of Horse Radish - then suffered to stand for some time, and afterwards formed into a Syrup, makes an excellent Expectorant -

Lecture 18th

8th - In the Inflammatory State of this Disease, Opium is improper - in the latter stage, when the Debility of the Lungs comes on, and the Pulse is diminished, which is about the 5th day - Opium is then proper - We should begin with small Doses - as 10 drops - for 10 drops in this Disease, will be Sufficient, to make a Man Sleep - whereas three times the Quantity perhaps in any other Disease, would not -

Cold Air - this is not to be used in that Degree in this Disease, as in the following Diseases we have mentioned - It is improper, except before Expectoration comes on - or when there is no Cough -

There is excess of Action in every part of the System: except the Lungs — Intense Heat should for the same reason be avoided: after Expectoration. as Cold — the Heat of the Room where the Patient lays. should not be above 63d of Farenheights Thermometer ——

10th Sitting Up. is of great consequence. before the Crisis in this disease, and is not to be dispensed with — it frees the patient from the Heat of the Bed — and gently takes down the Action of the System — After the above Evacuations &c — Sometimes Symtoms of Nervous Fever. and sudden Debility come on — in this case, we must have recourse to Wine, and Opium ——

We proceed, nextt to the Cure of —

Pneumonia Notha —

The Symtoms of this Disease, are pain in the Breast, or Side — the patient can lie only on one Side — on the Back, or cannot lie down at all — there is no Cough — the Pulse is sometimes hard — but more frequently soft, and full — attended with a Fever. that is very inconsiderable The Proximate Cause of this Disease, is an Effusion of Blood, or Serum, into the Lungs — induced, by excess — or defect of Action in them — this is ascertained by the numerous Dissections of Morgagni The predisposing Causes, are whatever debilitates the System — as the long continued application of Heat & Cold —

Intemperance — Intermittent Fever — Small Pox — Measles — Gout &c — The exciting causes are, the same as Pneumonia Vera — —

It differs from the Pneumonia Vera,

1st — By its attacking less Robust Habits —

2d — By its being accompanied with less Inflammatory Action — Old and Consumptive people often Die with this Disease — in this Species there is more commonly an Effusion of Blood — in the other only Serum — —

3d — By its attacking very Sudden and most frequently in the Night — from these Symptoms and its attacking so Suddenly I have taken the Liberty to call it an Apoplexy of the Lungs — —

Cure.

The Cure of Pneumonia Notha consists in,

1st — Copious Bloodletting — Small Bleedings are not of any Service in this Complaint — In a Case of this Disease I took 36oz of Blood, in the Space of 24 hours from a Patient — I have been twice seized with this Disorder — which happened in the Night — I had once a slight attack of this Disease in the Evening — but in the Night I was suddenly seized — I got up and attempted to Bleed myself — but was unable — I accordingly sent for a Bleeder — who took 3xx from me — the next day I was much better, and was able to eat with the Rest — —

The Blood is frequently dense, but seldom Sizy - it is sizy sometimes, especially after the Meas
2d Blisters, these should be applied to the Side or Brea
3. Warm vapour received into the lungs ——
4th Pedelivium — 5th Volatile Alkali ——
6th Stimulating Drinks - particularly Mustard Whey - 7th — Opium ——
Cold Air should be avoided - Demulcents are seldom necessary ——
We proceed now to consider the Cure of the last Species - viz the — —

Pneumonia Typhoides

The Symtoms of this Disease are, Pain in the Side or Breast - accompanied with a hurni cough - Bloody Expectoration - a Pulse small and a little Hard - attended with a Fever - ——
The Proximate Cause of this Species - is small excess of Action in the System in the beginning - but great defect afterwards —— it is often attende with Billious Vomiting - it sometimes term inates in Death on 3 - or 4th - day - —
This Disease is supposed to be produced by Marsh Effluvia - but I have seen it quite in the Spring, when no Exhalation takes place and consequently does not depend upon Effluvi It is sometimes accompanied with the Erysipa and Miliary Eruptions - sometimes Pimp appear about the Shoulder - - it is attende

with Petechia likewise. - this appearance, some=
=times takes place, in Russia and the Southern
States ——— The most Pathognomonic Sign,
of this Disease is its coming on with a vom=
=iting — the Matter evacuated, is sometimes
of a Green colour ——— This Disease generally
ends in a tedious Typhus Mitior — and
sometimes in Typhus Gravior, and Death —
I have seldom seen a Pleurisy coming on with
a vomiting, that has not either been Acute,
Dangerous or Fatal ——— It generally seizes Debil=
=itated Habits. Blood drawn in this disease
is Black, covered with a thin livid Pellicle,
which adheres to the Sides of the Bowl, containing
it ——— It is a very dangerous Disease, and
requires the utmost Attention ———

Cure.

1st Is Bleeding proper in this Disease?
It is injurious unless a hardness of the Pulse, with a
considerable degree of pain attends — the appearance
of the Blood, should deter us from a second Bleeding —
Dr Chalmers forbids bleeding to be used in all
Autumnal ~~Fevers~~ Pneumonias — these appear
to be Intermittent Fevers combined with Inflam=
=matory Action in the System —
2d Next to moderate Bleeding, are vomits,
especially in the Autumnal Pneumonias.
3d Blisters — 4th Stimulants; as Wine Whey —
Snake Root. Opium — Volatile Alkali —
Marsh Vapour — and Bark. ———

The danger to be apprehended in all these Species, are taken from the violence of the Fever — violent dry Cough — difficulty of Breathing — partial Sweats — Shifting of the pain about in different places — and Turgescence & Redness of the Face and Eyes — these are the most dangerous Symtoms

The different Species of Pneumonia, End, or terminate in three different Ways — —

1st — In Resolution — 2d — In Suppuration — —

3d — In Gangrene — —

The Pneumonia vera, terminates in Suppuration the matter in Suppuration, is either Effused into the Lungs, or into the Cavity of the Thorax, producing Empyica, or Empyema — where no Remission takes place before the 14th or 15th day, Suppuration is then to be apprehended — The Symtomes of Suppuration may be known — from the Rigors, a Shivering of the Body — Cessation of Pain, and difficulty of lying in an Horizontal Posture — The Pulse which is softer, and Fuller — difficulty of Breathing, which is increased with the Cough, a Swelling in one Leg, or Thigh — — Some have recovered after Abscesses have broke into the Lungs but if not — Consumption commonly takes place

The Late Dr Franklin, had two Abscesses formed in his Lungs, one while he was Young — the other at the age of 30 — He had formed a Theory, on the Action of the Air — and supposed that where it was applied equally to all parts of the Body — no danger would attend — if Cold was uniformly applied or Moisture — he supposed no Injury would follow

And he strengthened his Doctrine by Arguments drawn from the Life of Fishermen, and Washerwomen; - who are most exposed both to Cold, and Wet - and still are Healthy.

There appear to be two defects in the Doctr. Theory. He did not in the first place attend to the debilitating Effects of Cold, particularly when united with Moisture - or to the Manners of the People, mentioned above - which strengthens them against the attacks of the Disease - in Conformity to his Principles. the Doctr went frequently into Rooms newly washed - or with his Windows open - in the depth of Winter; when the extreme Coldness of the Rooms, made it uncomfortable to others - sitting one Day - opposite to an open Window - he fell a Sleep exposed to a Current of Air - the effect of which Exposure - was an attack of Pneumonia, which terminated in an Abcess - & and with that he Died - falling a Victim in some measure to his Metaphysical principles of Medicine.

I have known two instances of Abcesses without a cough - one happened in a young Lady; who had a predisposition to an Abcess in the Lungs - I Bled her as often as she could bear it - she at length acquired a reluctance to be Bled - and another Physician was employed - who humoured her - after that she daily grew worse - - Several Times before her Death - I had given it as my Opinion, that an Abcess was formed in the Lungs - it was an Opinion merely, for the many things

concurred to induce fresh belief. Yet I was not certainly determined about it — before her Death she desired that I would open her; when she Died, her Friends told me. that she requested I would open her — Gladly would I have excused myself but I was obliged to undertake the Business — When I went there, I took only one Physician with me — he was a Friend on whose Fidelity I could depend — for I did not wish to trust my Reputation with any Physician —

On opening the Thorax, the Left Lobe of the Lungs was uninjured — on removing the Covering, the Right Lobe also appeared — and appeared Whole — Judge now of my Situation, and Feelings — there however seem'd to be an adhesion to the Pleura — and as the other Physician was passing his fingers along to seperate the Lungs from the Pleura, that a fair view of them might be had — he slipt into an Abcess — It now appear'd that I had been right in my Conjecture — The Abcess had consumed almost all the Substance of the Right Lobe — only half of it had been used in Respiration (See N. Col. Med. Commentaries) The Abcesses frequently break of themselves — the Matter of these Abcesses is generally of a Fatid Smell — they often produce Death in their Rupture — These Abcesses often continue for Weeks, Months &

The Hydrothorax sometimes follows Pneumonia, Dr. Brown says it is produced only in those cases, where copious Bleeding had been used- but he is mistaken- for I have seen it arise, where Bleeding had not been used plentifully- it seems to be produced from a deficiency of Bleeding, but seldom from Excess of Bleeding ——

Dr. Browns Opinion, would seem to have some Influence from the following— A Tobacconist of this City, was laid up with Pneumonia- he was Bled largely and got better- but imprudently exposed himself too soon to the fumes of the Tobacco— the Disease afterwards terminated in Hydrothorax —

I have just received the following Fact from a Gent. in this City— who had been lately in the Austrian service— which seems to countenance the possibility of opening an Abcess in the Lungs— according to Dr. Hunters proposal— A Gent.n in consequence of Pneumonia had an Abcess in the Lungs- following the advice of his Physicians he traveled into the South of Europe for his health— In some part of his Journey he had a conversation with a nother Gent.n which was followed by mutual Menaces— and the common succedea a Duel— They fought with Swords— the Gentleman with an Abcess received a wound, through his Lungs— the discharge instead of being Bloody— was Matter— and he entirely recovered, from his Complaint —— — — — — —

Lecture 19th.

Influenza, or Cold.

This disease consists in a preternatural & increas'd Excretion of Mucous from the Nose, Fauces, & Bronchiæ accompanied with a Cough, fever, Coryza, and sometimes with a difficulty of breathing. ——

The Proximate Cause of this disease is Excess & Irregular Action in the Vessels of the Nose. ——

The Predisposing Cause is the same as in Pneumony but in a greater degree. —— The more people are debilitated by Luxury, and Civilization, the more apt are they to be affected with this disease. ——

The most frequent cause of Catarrh, is Contagion — It was Epidemic here in the Years 1733 - 49 - 61 - 71 - 72 - 89 - 90 — I remember when it prevailed in the Years 71 - and 72. Notice is taken of it in Dr. Shaw's Travels, who mentions to have seen it here in the Years 61 - and 62, — It appeared in the Year 62 — in Great Britain. —— It is the most universal Epidemic to which the Human Body is exposed — From whence is the origin of this disease? — Dr. McCauley says it is probably owing to the intercourse of Strangers with the Natives. —— There is a small Island among the Hebrides, near Scotland called St. Kilda owned by a Man of the name of M'Lead, he used to send his Secretary once a Year to this Island, in order to receive the Rents, which

were due to him. every time the Secretary went, a Catarrh spread around the Island — the same thing happened there as in the other case — this is a strange and curious fact —

Civilians say that the appearance of Man, on the Feild, is the first signal of Battle — so likewise the first appearance of a Man, is the signal of disease — "Man's greatest Enemy, is Man"

Dr Blane tells us that diseases have been produced by the Crews of different Ships, mixing with each other — May not the Influenza be produced in some manner Analagous to this? —

The Army of the United States was remarkably unhealthy in the Year 1776. when the Troops from the different parts of the Continent had united their Forces, but in the campain of 1777 at Boston, where the Soldiers were almost of one Climate, Society, and Manners they were very healthy —

The Breath, and Perf. — may produce it. — A difference of diet, and Manners may give such a difference to the breath, as to act as a Stimulus, and thereby produce this disease —

The Greenlanders were very offensive to the Europeans which seems to arise not only from their Aliment and Manners, but probably from their perspirable matter. — This Contagion was supposed to be produced from a certain constitution of the Air — but this is a false and Absurd Opinion. — As objections to it I make the following —

1st. It occurs in all Seasons, and in all, and very opposite

States of the weather — When the Influenza appeare here in the Years 71 and 72, the Weather was uncommon variable; — When it raged here last Year it was preceeded by very dry, equable, and Steady weather from this I conclude that the Weather has nothing to do with this disease — I have the Authority of Dr Sydenham, Huxham, Cleghorn, Hillary &c Dr Further, if it was in the Air why do not all the people, or a whole City, take the Infection at the same time?

For the History of this disease I refer you to Dr Cullen I shall now give you the history of the Influenza, as it appeared in the close of the year 1789 previous to its appearance in the City in 89, the state of the Weather in the Month of Septr was dry, cool, and pleasant, there was no rain for six Weeks — In Octr the Influenza was brought from N. York by the Members of the Episcopal Church — It was attended by the following Symtoms — It came on with Lassitude, Chills &c Fever, an Accute pain in the Head and Eye-balls, Abscesses appeared in the Frontal Sinuses: In some there was great itching in the Eye-lids. — In some there was a swelling, and Inflammation of the Eye In many cases it came on with a Sore Throat — and hoarsness — a pain in one, sometimes both Ears, attended with deafness in some — Some had a Swelling behind the Ears —

Several persons were affected with violent Sneezing, and a discharge of Acrid matter from the Nose — In some the Nose dropped Blood, in others it ran in streams to the quantity of 320 — In some there was a defect of taste — In some there was a want of Appetite — in others a good appetite — Some had a soreness in the Mouth — Swelled Jaws — Toothach &c — In this disease the Breast was affected with Dyspnea, or difficulty of breathing, pain in the Sides and Cough — It was universally attended with a Cough) which was very painfull and sometimes convulsive — one or two died in the act of coughing — Many spit blood — In some it affected the Trachea chiefly — I saw one case accompanied with Cynanche Trachealis — the fatal cases generally terminated in Pneumonia Notha — It sometimes produces defect of Speech — the Stomach was sometimes affected with Nausea and Vomiting, In some it fell upon the Bowels, and was carried off by a Diarrhea — In genral the patients were Costive, or Regular — the Limbs were sometimes affected with violent paine, which were mistaken for Rheumatism, particularly in the Back and Thighs — Profuse sweats over the whole body sometimes accompanied this disorder — The Pulse was generally tense & quick, but seldom full — the fever had evident marks of Remission, which generally happened on the fourth day — but the Cough generally continued 2 or 3 Weeks —

In several instances the fever ran on to Typhus — In some cases it was accompanied by Miliary and Erysipelatous Eruptions — It affected Adults of both Sexes — some Women suffered Abortion from it — It affected very few Children below Eight Years of Age — The Smell of Tar or Tobacco did not prevent it — nor did other diseases — for it was blended with every Species of Chronic complaint — it insinuated itself into the Chambers of the Sick, by means of the Nurses — It was taken a second time — the second attack was generally milder than the first — but in some few cases it was more violent — sometimes the changing of Situation, will favour the action of the Contagion — An Old Woman had it three times &c — Persons who worked in the open Air, or along Shore had it more violent than those who worked within doors — Lunaticks generally escaped it — out of 35 Lunaticks only 3 were affected with this disease — Many Thousands ~~were affected~~ had it who were not confined to their Houses — few escaped, who were exposed to it — It intercepted all Business, and even Divine worship was disturbed by perpetual coughing — It proved fatal only to Old people, and those who were previously debilitated by other diseases, particularly hard drinkers & Consumptive people

In the Southern States, this disease was more fatal than here. — It is strange to relate that it was of use to some who were of weakly habits. —
This disease was not confin'd wholly to the Human Species, for it affected two Cats, two Dogs, and two Horses. to one dog which was affected with this complaint a Lady gave ten drops of Laudanam and therewith cured him. — The Scarlatina Anginosa, which raged in Septr disappeared upon its approach, but appeared again when the Influenza was on the decline. — I Inoculated several for the Small Pox, all of whom had the disease favourable. —

Cure. Catarrh whether from Contagion, or the temperature of the Air, is never a trifling disease. — Catarrh from the Air, is more dangerous than that from Contagion, because it is more apt to be neglected, and from thence more liable to terminate in the Consumption. — We shall first consider the cure of Catarrh arising from cold. — This consists
1. In Blood-letting — in determining the quantity and frequency of it, we should be governed by the pulse, I once bled a Methodist Minister Sixteen times in this disease, in six weeks, and he recovered, the blood was always sizzy. —
2^d Vomits and Nauseating Medicines. —
3^d Low diet, as a Milk and Vegetable one. —

4th Diluting drinks, as Sage and Balm Teas- Apple and Barley waters, & Hyssop tea.- Garrick the celebrated Actor, was very much troubled with this disease - his cure consisted in eating a Salted Herring, which of course made him drink plen= =tifully of cold water - - - - -

5th Demulent drinks, as Flaxseed tea &c - - -

6th Blisters - - - 7th Warm vapour - - - -

8th Opiates, they should be used Night and Day when the cough is troublesome - - during the Inflam= =atory diathesis cold may be prosper - after the disease subsides, moderate warmth should be ap= =plied - - - - The following remedies were used for the Influenza - -

1st Bleeding, In this disease I bled when the pulse was full and hard, and sometimes when slender, together with this I used all the remedies mentioned above for common catarrh - when Pneumonia attended this complaint I sometimes bled twice, the blood was always Sizy - - - - -

2d Vomits were used, but they did not terminate this disease so soon as the common cold - - -

3d - In cases attended with debility Stimulants were used as wine &c - In Acute pains without any Inflamatory Action in the pulse, I gave Laud= it was given in one case to the amount of 1209 grs in one Night - - - Thus far for the Influenza, which appeared in 1789 - We proceed now to con= =sider it as it appeared last Spring - We shall first give a short account of the weather - The Winters of the Years 89 and 90 were remarkably

mild, the River Delaware continuing Navigable the whole Season. — On the 3d of March it was very cold, and the weather of the remaining part of the Month very changeable and variable. — — —

The diseases which prevailed in April, were Catarrh, Pleurisy, Measles &c — In the begining of May the Influenza made its appearance again; it was attended with the following Symtoms, some when it appeared this time were affected with Mania — Some had no Cough — in several it came on like an Intermittent, with Acute pains in the Back, and Head — Some were affected with Miliary Eruptions &c Some had a blue, and dark colour in their hands — Several were affected with Acute pains in the Rectum &c — I saw one case in which it produced Ishuria — two an Anasarca — three a Palsy of the Arms — Sneezing, and pain in the Ears were less common than last Fall — the Women had irregular appearances of their Catamenia &c — A pain in the Eyeballs was an universal Symtom, or complaint — In some a Bubo or Abcess appeared in the Groin — I saw no other Epidemic prevail at this time — the Prisoners in Jail, who had it the Fall before, escaped it this time — I shall here add two facts concerning this disease — 1st It prevailed with great violence at Cape May, It was more fatal, and carried off more near the Sea Shore — this was probably owing to the Mixture of Land and Sea Airs, which appears

to be very unfriendly to the Human Body. It was likewise more violent in New York than in this City, owing to its contiguity to the Sea — the effect of Land and Sea Air, near the Sea Shore, is proved in three different Societies — the Presbyterians lived near the Sea Shore (within two Miles) of whoom thirty died — the Baptists about 4 Miles further, of whom not half that number died — and the Quakers 4 Miles beyond them of whom hardly any died —

2d — The Indians are never subject to a Catarrh from Cold, and when this distase was carried amongst them they were ready to ascribe it to Witchcraft; it was very fatal amongst them, and more violent than with the White people — Mr Elliot who gave this account, gaind their friendship by curing some of them with Opiate Pills — A famous Indian Cheif died with it — this was at Niagara — The Remedies for the Influenza in the Spring were nearly the same as in the preceeding Fall — Bleeding appears sometimes proper in particular cases in other it was very improper and even dangerous — I will conclude with the following remarks — 1st — It is propagated to the greatest distance, affects the greatest number of people, and passes sooner thro' a country than any other Epidemic we know of — 2d It appears that neither Climate

Society or Custom of different persons produce any material difference in the Symtoms of this disease.

Lecture 20th

Angina Inflamatoria.

This disedse depends upon an Original predisposing debility. ---

It consists in a preternatural redness and pain in the Fauces, or Glands of the Throat — difficulty of Swallowing and Breathing, with a hard and full pulse, accompanied with fever — The Proximate cause of this disease is the same as of the other inflamatory diseases. ---

There are 3 Species of this disease — The Tonsilaris, Pharingaa, and Parotidea. ---

1st The Tonsilaris, affecting the Mucous Membrane of the Fauces, but especially the Tonsils, with redness and Swelling, accompanied with difficulty of breathing and Swallowing, and a high Phlogistic diathesis. ---

2d The Pharyngaa attended with redness in the bottom of the Fauces — very difficult and painfull deglutition. Respiration sufficiently free — and fever. ---

3d The Parotidaa attended with great Swelling of the Parotid and Maxillary Glands, appearing on the outside — the Respiration and deglutition but a little affected — and a fever for the most part mild; with a Swelling sometimes of the Testicles of Males, and the Breasts of Females —

(For the history I refer you to Dr Cullen)

Cure. The remedies for the two first Species, are—
1. Bloodletting, this should be used copiously, also, cupping from the part affected, ———
2d Purges, these should be of the Lenient kind.
3d Vomits—they are sometimes necessary as debilitating remedies ———
4th Neutral Salts, particularly Nitre ———
5th After the disease has continued for some time and deficiency of action appears, then the application of Oil & Spirits of Hartshorn should be applied in a Liniment to the outside of the Throat.
6th Gargles, they should differ according to the different Stages of the disease; in the first Stage they should be of a Sedative nature—as Gargles of cold water, also a Gargle made of Sage Tea, mixed with Honey, & Vinegar is very good in the close of the disorder.—When debility appears they should be of a Stimulating nature, & should be used with other Stimulant Medicines—as Steams of warm water impregnated with Vinegar &c #
Gargles of Spirits, before the disease is formed, or in the last Stage of it, are proper ——
A Gentleman who was subject to this disease, used gargles of Spirits before the Action of the System came on with good success ——
7th Blisters—they should be applied behind the Ears, & round the Throat.—Lastly if all the above remedies fail. Bronchotomy may be used as an alternative

A Gargle of Vinegar, Water, Honey & Crude Sal. Ammon. very good —

this D.r Bond once performed, & I am persuaded would have been successfull had it been done sooner, it was on D.r Martin the Provost of this Colledge — it however preserved him two hours longer, and allowed him to make his will, and settle some Business, which would have been otherwise, left in a very dangerous Situation ——

It is liable to return again with Cold, when there is evident Signs of Suppuration, it should be opened by puncture — Case of a Gentleman who had been very ill in his disease and sent for D.r — Radcliffe, when the D.r came he found by examination that there was a Suppuration of the Tonsils, & that the Tumour would probably burst soon, that he might hasten it soon he ordered some Hasty pudding to be made & when it was got ready, sat down in the Patients Room at the Table, with his Servant opposite to him, as they were busy eating, & the Servant with his face downwards, the D.r took up a Spoonfull, and as the Servant lifted up his Head, he threw the contents of it in his face, this excited great Laughter in the patient, so that the exertion burst the Tumour and the patient recovered ——

The Parotidea, is nothing but the Mumps commonly so called it is generally a slight disease, and the least distressing of the three

Species. after it has left the Throat. it sometimes falls down & affects the Testicles of Males, and the Breasts of Females — It may on this account without caution be mistaken for the Venerial disease — It is generally cured by a purge or two, or any discutient application ——

When it affects the Testes Emetics said to cure it — —

Rheumatism.

This disease comes on by pains affecting the large Joints frequently pursuing the course of the Muscles, accompanied with a full, hard pulse, and fever, increas'd by external heat. — —

It is distinguished from Gout

1st — By its generally attacking the large Joints, whereas the Gout generally attacks the small ones.

2 — By its very seldom affecting the Stomach. the Gout almost always doing it —

3 — From the Patient labouring under the two diseases. the Gout belongs to the Luxurious — the Rheumatism may generally a companion of the Poor.

I shall here make a few observations on this disease

1st — Rheumatism depends on predisposing debility

2 — It ocurs in those parts which are most exercised, and where the Circulation is most languid —

3 — It ocurs after great exertion in Walking, and lifting of weights, particularly if this Exercise has been in the Colder — & this account Soldiers and Sailors are most subject to it — The Tar Spring at French Creek, relieved

General Lincoln's Soldiers of the Rheumatism
For the History of this disease I refer you to D. Muller,
Cure. The remedies in this disease are —
1st — Copious blood-letting —
2d. Lenient Purges — these remedies D. Sydenham
used alternately, for on the intermediate days
of Bleeding he gave Purges —
3d. Nauseating Medicines. joined with Neutral Salts,
Dr. Hillary recommended a Mixture of Nitre
& Sal. Ammoniac, — the powder compos'd of Nitre
Calomel, Tartar Emetic & Opium. I have
tried without any success — I suppose if any
advantage arises from its use, it must be after
the force of Action is subdued — Opium is the most
hurtful & injurious, Calomel & Tart. Emet. are
much better when given alone, they increase the
secretion from the Stomach & Bowels. Oesopha-
gus &c — Calomel in large doses will not irritate
the Arterial System, for it generally purges; 5 gr. of
Calomel may be given to advantage —
4th — Low diet, this is of the utmost importance, in
proportion to the inflamatory diathesis prevailing
in the System. the diet should be of a Vegetable nature,
it is common to recommend Roasted Apples. but
I have met with a fact, where the Acid of them
evidently increas'd the Rheumatism. Cyder and
Water have also increased it — —
5th — Cool Air — the cooler the better for the patient,
the wrapping the affected Limb in Flannel, is im-
proper,

6th — Heating Applications to the parts affected, are injurious, hence patients are generally worse in bed &c — Blisters, Molasses, & Cabbage leaves are sometimes good applications after Evacuations are made use of. — Opium is hurtfull while the Inflammatory Diathesis is present. — — —

Is Cold Water a safe application? —

We apprehend it will be of service from the following fact, conerning the Foundering of Horses which is analagous to this disease, it is an Inflammatory Rheumatism produced by great Cold — it may be cured by leading the Horse into a Creek, & letting him stay there secured by some fastning, during the Night. perhaps it would be better to lead him backwards & forwards —

A Gentn — Mr Elcors, who was very fond of hunting never used to put his Hunters into a Stable directly after hunting; but had them led about 'till they were well, by which means they never had the Rheumatism —

If Men were after a fatiqueing Journey were to Walk a little they would prevent the Rheumatism, & feel less fatiqued the next day. —

This disease has receiv'd different names from the part which it affects, as the Lumbago, & Sciatica the Lumbago has sometimes been mistaken for Nephritis, but is distinguished from Nephritis by having no Nausea or Vomiting — —

Phthisis Pulmonalis.

I define Phthisis to be a wasting & debility of the Body accompanied with a Cough, Hectic fever, & for the most part expectorations of Pus. ——— It may be divided into three Species (viz)

1st The Sthenic ——
2d The Mixed. &——
3d The Asthenic ——

I chose to call them Species, not Stages. as calling them Stages may lead to error.

I have seen the first Species appear last. and the third Species appear first. —— this was the case with the late Dr. Bond. his pulse was full, and blood sizy to the last. — one of his latest actions was to bleed himself. and died in an half hour afterwards; — this was also the case of the Patient who died lately at the Hospital. The first or Sthenic Species is accompanied with Cough, Fever, Expectoration of Pus, and a hard Pulse. ——

The second or mixed Species; in this, the fever is less, pulse weaker, attended with chilly fits, Night Sweats, and Diarhea. ——

Before I proceed further. I shall first make a few general Observations ——

Depends upon a peculiar kind of action which draws the system into contact with it by Sympathy ——

1. We infer that Consumption is a disease of debility, firstly from the causes which produce it. — It is produced by Hereditary weakness, from a bad conformation of the Breast. Remittent — Intermittent — & Nervous fevers. by debilitating the System sometimes terminate in the Consumption. — Grief, Scrophula, Pneumonia, Catarrh, Hypochondriasis, Asthma, Hemoptisis, Hypercathasis, or violent purging, Venerial disease — External violence — Cold and damp Air — have all had a share in producing this disease — Sr. George Baker, observed that Consumption was frequently produced by excessive Purging — We infer that damp Air produces this disease from its frequency in Europe, and on the Sea Coasts — The Young Ladies who had a remarkable attachment to walk in the Evening, on the Battery at New York, fell a Sacrafice to Consumption — Sitting in Porches in the Evening, is very prejudicial to health. Secondly, from the Constitutions of such persons who lead Sedentary lives; as Tradesmen of different occupations — Women, and people of irritable habits — Inhabitants of large Cities, who by their peculiar modes of Civilization are rendered liable to it — The predisposition is increased by intemperance — We have scarcely ever seen the Indians, or first Settlers, affected with this disease, seems to be connected with a peculiar state of the Genitals —

The Country people also who are exposed in the Field, and work hard are not affected by it —— Thirdly we infer that it arises from debility, from the Age of persons which it affects, it being generally between 16 and 36. at a time when the System is most liable to disease — tho it may come on people beyond that Age ——

II Consumption is a primary and original disease of the whole System, & that Ulcers, Tubercles, Hæmoptisis, and Nomica are not the causes as is supposed, but merely the consequences of the disease —— We infer that these are not the causes. 1st From debilitated Constitutions being most liable to the disease; — as the Nomica that sometimes succeeds Pneumonia will not terminate in Consumption, provided there be no predisposing debility ——

2 — From the precursary symptoms which generally attend, before the disease is established, these are — A quick Pulse, burning of the palms of the hands, feverish heat, & flushings of the cheeks — these Symptoms have continued six Months before Consumption came on ——

3 — Under this division, I will add the following fact from Dr. Lind, that out of 5743. patients, from the first of July 1753. to the first of July 1760 — 360 of whom were Consumptive; one fourth of which occured by external accidents

It seems to embrace this period to attack people between puberty

as falls, bruises, sprains &c— which they received one or two years, before they were affected with the diseased—

4th— From the causes which produce it, all of which are of a debilitating nature— as the Venerial disease, Pneumonia, Grief, bad conformation of the Breast &c—

5th— We may infer that it is a disease of debility from the Remedies which cure it—

6th— From this disease alternating with Rheumatism and Madness, which are diseases of the whole system, I once saw it terminate in Rheumatism of the head and the person afterwards got well—

The termination of this debility, in an affection of the Lungs is no more than what we se in other cases— In Old Age, when great debility of the Lungs comes on, a Cough is frequently produced, called Catarrhus Senilis— Dr Lind says the Low Nervous Fever, frequently terminated in a Cough— I saw two cases of Hypochondriasis induce all the symtoms of Consumption; they were in two Ladies— The debility preceding death, particularly affects the Lungs, which produces that peculiar noise called the Rattles, - this is a kind of sudden and Apoplectic Consumption— It is a law of the Animal Economy, that in

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& the natural interruption of the menses the Cure - Emetics of Sulphate of Copper & Tart. Emet ac- from

in a general and universal debility of the Body the exciting powers will act with more force upon the weakest part, and of consequence will act more upon the Lungs which are the weakest of the external parts of the body ——
Measles — Catarrh — Pneumonia. & Vomica will not produce consumption, unless there is a predisposition to debility before ——
Dr Franklin, had once a Pneumonia affection which terminated in an Abcess of the Lungs; and afterwards recovered; or where debilitating causes have not been applied afterwards such as Cold - Excess in Venery — Intemperance — Consumption is said to have been produced by Contagion and with some degree of propriety — those who have attended on the Sick, and have slept with them have died with the Consumption — but here I imagine it is brought on more by their rising in the Night, and being exposed to the alternation of heat and cold — but I believe it is possible for the seeds of Consumption, to be conveyed by a portion of Acrid Matter into a sound body, which will not get immediately, untill a general debility of the body be produced — A fact in favour of this opinion, happened in Connecticut, where two Families, Negroes & all were carried off with the Consumption — here was evidently Contagion ——

1-2 to 10 grains - after having previously drank half a pint

In Portugal they burn the Cloaths of those who have died with Consumption — Morgagni relates that Valsalva would not be present at a dissection when the person had died of a Pulmonary Consumption — but let it be remarked that Valsalva was predisposed to Consumption — dust — stone and other foreign matters have produced Consumptions — the matter entering the Lungs operates first by inducing debility from coughing constantly — the Millers cough has been ascribed to the dust in which they are so much involv'd — but I imagine it is more frequently produced by their lifting great weights — frequent exposure to heat and cold — and by their constant watching day and Night — therefore this does not invalidate the opinion that debility is the predisposing cause of the disease —

III. In proportion to the universal debility of the System, an increased Excitability will take place, in certain particular parts more than in others — and consequently more in the Lungs — hence speaking with passion — coughing — bellowing — running — violent exercise &c acting on the Lungs in that debilitated state — frequently become exciting causes, which finally terminate in Consumption —

of water or Gruel. ℞ to be repeated

Pneumonia and Consumption depend upon the same causes which produce Consumption — are inferior to that which brings on Pneumonia — This disease is then to Pneumonia what Tæbicula is to Intermittent Fever; Consumption should then be called after Dr. Brown the Pneumonicula — Pleurisies are not so common as they were 60 years ago, because the modes of civilization now are more debilitating — two exceptions may be produced to this general doctrine — the disease being produced by Contagion & Vomica — but Vomica does not produce Consumption untile the whole System is debilitated — There are some persons who have had Tubercles all their lifetime without producing the Consumption —

For the discription of this disease I recommend you to Doct. Cullen, and Pothergill —

One other circumstance I will mention relative to this disease, which is remarkable that patients not only have a constant hope of Recovery but likewise conceal such Symtoms from the Physician which are necessary to the knowledge and care of the disease —

Lecture 25th

Cure. The cure of the Consumption divides itself into several Species or Stages, & first of the —

Calomel Opium & Digitalis combin'd untill it produces a Soreness of the mouth. the Cal. then to

Prewenting Stage.

This disease has prepositary, or recursory Symtoms. these are, a quick pulse, burning of the palms of the hands — stiches in the Sides — feverish heat and flushing of the Cheeks —

The remedies are — Gentle exercise, — sometimes Cold Bathing — and a disetion of all those causes which produce it — Cold and damp Air, and Rooms that are damp are to be avoided — all Sedentary occupations should be forsaken — Young Men who are disposed to Consumption from their Sedentary business, should be seperated from their Masters —

If the pulse be full and hard, with pain in the Side, gentle Vene-Section will be necessary — the diet should be regulated, and all irritable causes removed —

Exercise may be divided into Active — Passive, & Mixed — The Active exercises are walking running & Pumping — the Passive are riding in a Carriage, Sailing and Swinging — the mixed are — riding on horseback, rowing a Boat &c —

Exercise in this stage of the Consumption should be of a mixed kind — but in the advanced stages of debility it should be of the passive Species —

We shall now proceed to the cure of the first and second Species — this consists in —

1st — Gentle Bleeding, this operation is more necessary in Pneumonicula, than in Pneumonia, only the quantity drawn to be omitted, & the Opium & Digitalis continued &c

must be less than in Pneumonia — the quantity should be from Six to 3vi repeated two or three times in a week — I lay great stress upon this remedy, Mead, Pringle — and Cullen all recommend it — 2 Low diet, particularly a Milk and Vegetable one — the use of Milk follows in this order (viz) 1st — Woman's Milk — 2d Asses Milk, 3d Goats & 4th — Cows Milk — — —
5th Browns remedy consisting in Beef-Steaks, in these two Species, is certain death — — In cases of great Excitability, where Milk itself is too stimulating water may be mixed with it — or Whey, and Butter-Milk, as being less stimulating, may be used — the Whey is destitute of its Cheese and Butter-milk of its Oily parts — — — Whey seems to suit better in irritable Constitutions, In some cases a little Animal food should be allowed, here the White Meats are to be prefered, Chickens Veal, Oysters and soft Boiled eggs, they are less stimulating than other Meats — — Stimulating Aliment where there is any Inflammatory Action in the System, should be avoided as much as possible; regard should be paid to the choice of Vegetables they should be the least Stimulating — Van Switen says a Consumtive person was cured by eating Strawberries — —
The fresh juice of Sugar Cane has been used with success in the West Indies in the cure of Consumption — likewise the juice of raw

Apples just from the Press ——— Morgagni recommends Milk with toasted Barley made into Gruel — Roasted Apples are very proper & good, A mixture of Flour and Apples called apple: Mush is an excellent food for consumptive patients, it may be mixed with Milk, as the patient chooses When the Stomach is affected with Dyspepsia, little Animal food, & that of easy digestion is to be used, the Meals should be divided and often repeated tho in small quantities — Six small Meals in a day, are much better, and preferable to three large ones. ———

3d Vomits. Ipecacuanha should be preferred to Tart. Emet. — Morgagni recommends them highly, they take down the Inflammatory Action of the System and are of use only when Inflammatory diathesis prevails, they should never be given after Inflammatory action has ceased ——

A Panegerie on their use, was the whole design of Dr Reids Treatise on Consumption; but one remark is necessary to be made here, Dr Reed used them indiscriminately, in every Species of the disease ——

4th Demulcent drinks of the most emolient kind — Syrups in this Stage should be used in small quantities — in some cases Dr Cullens syrup of Horseradish may be used —

5th Evacuations should be performed by means of Blisters — Issues — Setons and Caustics — they are very useful — they excite an artificial weak part, and thereby throw off Plethora from the Lungs —

Bennet recommends Blisters as well as Caustics, I think I have seen them prolong Life ——
Case of a Gentleman who had an Issue running for two or three years, and was perfectly cured afterwards.
Perp Blisters are to be prefered, to repetual ones ——
6th —— Exercise which should be of the passive kind, called Gestation. this is one of the most gentle species, and is accomodated to the degree of Excitability in the System, it is necessary to begin with the lowest species as Rocking in a Cradle ——
Case of a young Lady who had the foundation of a cure laid by it, she was first rocked two or three hours every day till she acquired strength to ride; first in a Carriage, then on horseback; after that she took a voage to Europe, and is now perfectly well —— The Arabians used it under the name of Jactatio. —— To shew the necessity of accommodating the exercise to the degree of excitability in the System, I will relate the fact of a young Lady, who had all the symtoms but the cough, she was so weak that she kept her bed, her father who was acquainted with the benefit of exercise in this complaint, used to take her in his Arms every day, and bring her down Stairs, place her in his Carriage, shut the doors upon her and then gently agitate it for a few hours this he continued to do till she acquired sufficient strength to ride two or three Miles, very slowly in the Carriage; after that she got to riding on horseback with him, & rode at last twenty Miles a day, by this means she recovered —— We should proportion the exercise to the Excitability —— the first is rocking —— the next Swinging, then Sailing, afterwards riding in a Carriage

7th — Opiates, they are cautiously to be used, they give temporary tone to the Lungs &c——

8th — A moderate stimulus of heat applied to the Lungs as by Stove rooms &c—

It is thought that the benefit arising from Sea air is owing to its impregnation with Sea Salt. The efficacy of Country Air I believe is owing to a peculiar stimulus &— the Smoke of burnt Rosin and Tar is of service by the gentle stimulus which it affords; moderate Singing and Speaking are very usefull in this disease — Mr Adgate a very intelligent man, sensibly informed me that he had observed some of his Pupils, who had a predisposition to Consumption before they came to him, perfectly recover afterwards — this opinion is more especially corroborated by the Germans for fewer of them die than other denominations of Consumption, altho they live in Stove rooms, this seems owing to their universal Psalmody, for singing is a principal part of their Education. Speaking or singing too loud will produce Consumption — the celebrated Mrs Anne fell a sacrifice to her fine voice ——

Avoid cold, damp, and Night Air, also cold and damp feet by wearing corked Shoes, or Socks; this is of the utmost consequence in every species of Chronic disease, for by keeping the feet warm there is a more equable degree of heat kept up in the System and by that means a more equable circulation — Avoid unwholesome Air &c — When Curtains &c Promoting a determination to the skin by wearing Flannel Shirts is equally important in this disease Lastly a moderate Climate is of the utmost importance where the heat is not so great as to be a stimulus ——

A sultry July or August is as fatal as a variable March or April — Patients from this Country should be sent to South Carolina, Providence, Barbadoes &c — which are fit Climates for Consumptive patients — Portugal and Jamaica are not so good. The Island of Madaira is hurtfull on account of the purity of its Air, which stimulates the Lungs too much (see Dr Goodwins letter in Reads Enquiry) To render a Climate effectual in the cure of Consumption a patient should continue in it two years not less time will restore the

Cure of the 3 Species, Or Asthenic, where Inflammatory diathesis has been subdued or never taken place — It differs from the former Species as Typhus does from Inflammatory Fever — the remedies in this Species are very different from those of the former, here Stimulants are indispensibly necessary — They consist of — 1st Stimulating Medicines — 2d — Stimulating diet — 3d Stimulating Exercise.

I. The Stimulating Medicines are Balsams — as Balsam Peru. — Capaiva — Volat: preparations of Tar and Turpentine — Garlic, Bitters of all kinds — Decoction of wild Cherry, Dandelion, Horehound — and lastly Opium, which may be given Morning — Noon and Night. here the fallacy of Dr J Fothergill in reprobating Stimulants in this disease will appear — for Balsamicks which are of great advantage in this Species of the disease, he must have used in the first Species — Is Bark proper in this Species — Yes it is; but it is inferior

to all the other Stimulants is less agreeable, and sometimes excites an Inflammatory diathesis— but it is certainly sometimes of great benefit. I should have mentioned Bark as a preventative of this disease — then is the best time for using it— I have the authority of Dr Cullen. and I myself have frequently prescribed it with advantage ——

II. Stimulating diet. here we may Breakfast — Dine, and Sup with Dr Brown. Animal food is highly proper here, and a generous diet in every particular — Oysters have done wonders in this Species of Consumption ——

Case of a Gentleman, a Continental Captain, from Maryland who was reduced very low, and had dieted himself almost to death, he had lost hopes of his recovery and determined to enjoy the little time that remained of his Life, according to his inclination. in consequence of this resolution he lived freely, drank wine, eat Oysters & got well

Case of a Gent. from Delaware who was much in the same situation as the Capt. lived well and recovered ——

III. Exercise. this should be of the Active kind, particularly riding on Horseback, it is the best, Dr Sydenham says this has succeeded after diarrhea had taken place — A Case of an English Gentlewoman who was so weak that her Husband was obliged to hold her on the horse, while a Servant led on a walk — She at length so much recovered her health as to sit without support — this exercise was continued and she got well ——

Flannel ought to be worn next the Skin. warmth is better than Cold ——— and lastly a change of Climate if the patient can bear it ——— It is of no use to inspect the Matter Expectorated — as many are cured with Ulcers, as well as without ———

All Consumptions begin with a defluxion upon the Lungs &c ———

Many patients have died with all the symptoms of Consumption without an Ulceration of the Lungs A patient of Dr. Bond's had sound Lungs. as was found upon opening him after he had died of Consumption ——— Here I shall make 2 remarks 1st Those who have the Consumption from Tubercles have it the worst, and always the most dangerous &c — Tubercles appear in the Neck before they do in the Lungs ——— 2d The disease from Vomica is the most benign. is attended with very little debility. and is frequently cured by Nature alone ———

The cure by Strawberries can only take place when there is no predisposing debility ——— Case of a Capt. of a Vessel who had a Pneumonia in the Spring he had not been Bled. which terminated in Vomica, it burst and he was apparently reduced to the last stage of a Consumption, he had Night Sweats &c — he made use of good diet. got so as to ride in a Carriage, then on horse back; & Sail'd from here six weeks ago perfectly well ——— here the disease was cured because there was no general debility — But Consumption is not always curable by these means, it often baffles the use of diet. and every Medicine Yet it is not incurable, for it has yeilded to the healing Art

173. The means of performing this cure, are such applications as will give the same tone to the Systems, as those people have who are not affected with it — There are —
1st War — 2d Labour — 3d Exercise —
The toils of War and Labour are not always practicable, but exercise may ever be had — Van Swieten says Sailors and Fishermen have been cured by hiring Coachmen — for the effects of a Military or Camp life I refer you to a Pamphlet intitled. Free thoughts on Consumption — The exercise proper in this disease, is only to be had by a long Journey. Short exercises are hurtfull by exciting more action than vigour — they excite the Appetite without increasing the powers of digestion — they sink the spirits of the patients — Dr. Sydenham says long Journeys are more particularly proper for women than Men — the courage of women is more of a passive Nature. — that of Men more Active — They are not so enterprising and sooner resign themselves to despair, than our Sex — This will account for a fact taken notice of by Wm Hamilton. he says that after the Earthquake of Calabria. on digging into the ruins — the women were found with folded Arms as if they had immediately resigned themselves to their fate, but the Men were found with their Arms extended as if they contended with distruction to the last — The advantages of long Journeys over short ones, are
1st The constant succession of new objects which please the Mind and invigorate the Body —
2d — The continual change of Air which is very beneficial to Consumptive Patients —

3d The constancy of Exercise; so that action & power keep pace with each other ——

To render Journeys effectual, the following directions are necessary to be observed ——

1st Avoid fatigue —— it is thro' inattention to this rule that many cures are prevented —— for this purpose patients should begin with traveling a few Miles on the first day, and afterwards increase it by degrees, with the increase of strength ——

2d Plentifull Meals are to be avoided — likewise avoid traveling immediately after Meals ——

3d Avoid traveling too soon in the Morning — or in the heat of the day, or late in the Evening ——

4th Patients should change their apparel, with the change of the weather —— the weather when too warm, or too cold is equally bad ——

5th If patients should find it necessary to lie down in the day time — advise them to undress themselves, as they do when they go to Bed at Night — because Ligatures are injurious and unfriendly to Sleep —— always sleep undressed —— I knew a young Lady in this City, who undresses herself, as much when she lies down after dinner, as when she goes to Bed at 10 — or 11 Oclock at Night, and always rises refreshed and in good humour —— I knew a case of Cholic cured by unbuckling a Shoe ——

Mr Ingersol, the late Judge of Admiralty, cured himself of Giddiness, contracted by long attention to Cases on the Bench, by unbuckling

his Shoes, and untying his Garters —
Studious people should always have their
Clothes loose — for Ligatures are unfriendly
to the active exercise of the Intellectual powers
hence we se all Studious Men in Gowns and
Slippers, and frequently with open Collars
Ligatures like pain and noise are direct Stimuli
to the System ——

6th — Patients should never sleep in damp
Sheets — it would be better to carry Sheets
with them, but as this is not always convenient, they should have them aired before the
fire before they lie down on them — or sleep
between two Blankets ——

Dr. Franklin both neglected and despised this caution
but he did not attend to the effects of moisture on the
Sick, and reasoned too much from the strength
of his own Constitution — the more the patient
sit up without fatigue, the better ——

7th — Avoid large companies especially in the Evening
and at Night —— Suppers should be avoided —— A Gentleman with weak Lungs, died
the Morning after eating one of these Suppers.
The smell of many dishes of Meat —— the Air
injured by many breaths, Phogisticated by twelve
or fifteen Candles, was a Stimulus greater than
his Lungs could bear ——

8th — Consumptive patients should avoid entertaining and agreeable companions, as much as
they would the Plague. I do not tell you

to beware of Robers, and Highwaymen, but of merry fellows — for it is better for a person labouring under this disease, to meet Highwaymen than a merry fellow — I knew a female patient, who burst a bloodvessel by laughter, occasioned by a flash of humour — It must be noticed here, that while I am condemning Mirth I do not mean to inveigh against cheerfulness — the first belongs to the ignorant, and fools — the latter is the entertainment of the wise — Thus we may see here properly the common remark applied to them "They are too happy to be merry"

9th — Can any use be made of the passions? — Dr. Blaine &c — Hurricanes &c — Doct. Lind says many were cured by Earthquakes — There is a distinction to be made between fear, and terror — Fear is a debilitating power, and leads to inaction — Terror is invigorating and drives to exercise both of body, and Mind — Hope & Confidence are both invigorating remedies — The efficacy of the celebrated Berkly Springs in Virginia, proceeds chiefly from the great faith placed in them, by those who resort there — arising from the relation of many cures performed there — Conducting of Terror &c — Van Sweiten and Smollett —

10th — In what seasons should the Patients travel? — Travelling in winter or Summer is improper. Spring and Autumn are the only proper times. a patient may begin in Winter in the Southern States,

177 — and proceed Northward with the progress of Vegetation, and Spend his Summers in Canada — by this means he will have a perpetual Autumn, and Spring — let him always avoid the Sea Coasts — because a mixture of Land and Sea Air is injurious — Britons had better travel thro' these States, than on the Continent of Europe, for here are fewer calls for Luxury and dissipation, and a greater variety of new, striking, and invigorating Objects — Case of a young Lady who was extremely low — who was not expected to recover — She set last Spring on a Journey to Canada, rode slowly gradually increasing the length of her days journey and reached Canada in June, spent about a fortnight there, and return'd a few weeks since so much better, that I believe she will be able to stand the cold of this winter — when a second Journey will probably restore her to health —

Case of a Gent. from Connecticut. he had every symtom of dissolution; was advised to travel by his Physicians. he called on me in his way to South Carolina in the fall — Spent the winter there, and since quite recovered —

How long should traveling be continued

It should be continued six Months, in succession and be renued every two or three years, till the age of 36 years is passed — I shall conclude with two remarks —

1st — The love of health, like Money, levels all distinction

hence patients often fly to Quacks for relief — 170.
Dr. Chene says nothing is of so much importance to a Man as health, except their Eternal Salvation, and nothing they neglect so much as health, except their Salvation — I knew two young Men apprentices to a Printer, who were obliged to quit the business of composition and turn Pressmen, this employment, particularly exercising the the Arms and Chest, effected a cure in these instances, 2d — One other thing, writing directions, and prescriptions in a large and fair hand — Dr. Cullen wrote well — Dr. Brown on the contrary did not - probably because Cullen did, as their enmity was very great —

Lecture 22 —

Small Pox.

This is a disease of the whole System; it shews itself in the Lungs and Throat — (For the history of this disease, I refer you to Dr. Cullen, Hillary and Huxham)
The Proximate cause of this disease is an excess of Irregular, or deficiency of Regular Action, in the Arterial System, from the Stimulus of a Specific Contagion — here appears an exception to predisposing debility — The Symptoms, It is a Contagious Synocha, with Vomiting,

and pain in the Epigastric Region — on the third day begins, and on the fifth is finished the eruption of inflammatory pustules. which suppurate in the space of eight days — and at last go off in crusts — frequently leaving depress'd cicatrices, or pocky pits in the Skin — There are two Species of this disease Viz. 1st The distinct, or Phlogistic —
2d The Confluent or Typhoid —
The first I define to be a fever with a hard pulse, accompanied with a few distinct variolous pustules beginning on the third, and ending on the fifth day but here is sometimes an exception to this, for a second crop has appeared on the 9th & 10th day — the fever ceases immediately after the Eruption
The second I define to be a fever with a full and quick pulse accompanied with an Eruption of flat pustules; which generally begins on the second day, and sometimes on the first day of the fever — The fever continues after the Eruption — frequently attended with a Diarrhoea —
This disease has been further divided into the Adynamose — Cristalline — watery — and Bloody — these happen in both Species — The fever of the Small Pox is sometimes Intermitting — this would seem to favour the Idea that the Intermittent fever is the only Original Fever existing —
I shall here propose a few enquires —
1st — In what manner is the disease propagated

I answer by Contagion — by the Breath — Clothes — and Effluvia of the body — It is likewise conveyed by wind and Smoke — It is somewhat remarkable that fire does not destroy that this Contagion The Effluvia of Small Pox fever adheres to paper, and has been conveyed by Letters — Case of a young Man who went from his Fathers while the family had the Small Pox, to his Uncles that he might avoid it — some time after the Recovery of the family, his Sister wrote a Letter to him informing him he might soon return — In the common time from the reception of the letter, he was taken with the S. Pox. It is propagated after death — ? The Matter may be preserved many Months, if kept dry — The Chinese preserve it in — Boxes &c — Q — How long does the Contagion lie in the body before it produces its effects — Generally 12 or 14 days in the Natural way — Dr Clark says it has been for twenty days — can we destroy or lessen the Contagion — It may be lessened before the fever is produced by strong doses of Calomel and Tart. Emet. — In a frea &c — Is the disease Contagious universally — No it is not — some have escaped &c — We shall now proceed to the cure of the distinct Small Pox — We shall consider first the cure of the eruptive fever — Secondly the cure of the secondary fever —

101 The remedies in the Eruptive fever are—
1st Bleeding—
2d Purges—they should be strong; or mild ones more frequently repeated—as much progress should be made in debilitating the Body in one day in this disease—as in 3 or 4 days in Pneumonia——I took the hint of this treatment from Dr Hilliary's Treatise on the Small Pox—Case of a Sailor—
3d Blisters, they should be applied to the Neck if Coma attends or delirium—
4th Sitting up in bed Dr Sydenham recommends it has an influence in checking the eruption
5th Cool Air—it is less hurtfull here, than in Pneumonia, because there is less predisposing debility than in Pneumonia—
Case of a person in London, who contrary to the wishes of Dr Sydenham, was kept very warm, was supposed to be dead, was laid out accordingly the windows were thrown open in such a manner that a current of Air fell directly upon him he recovered in consequence of it, and was sure There is no danger in the use of Cool Air—
6th Cool debilitating drinks—Saffron Sea-Wine and all Stimulating Medicines are very improper and should be avoided——
7th Opiates they should not be given, untill the Night Eruption be compleated, and then they may be used at

The remedies used in the Secondary fever ——
—— the secondary fever becomes dangerous from three causes ——
1st —— From the great irritation of the Lungs ——
2d —— From Viscidity of Mucous in the Throat ——
3d —— From the sudden subsidence of the swelling of the hands and feet ——
To relieve the first cause, or Inflamation of the Lungs Bleeding — Blistering — and Emetics should be used, It is necessary to be cautious in the use of bleeding, The inflamation of Pneumonia is generally the Vera — Notha — or Typhoides — Hence you will bleed or not, according as it is one, or other of these Species — In the two first bleeding may be used — in the last it is improper — The second indication is to thin and evacuate the Mucous in the Throat — the same Suffocation appears here as in the Cynanche Trachealis. Its remedy is Mercury — this is an infallable Remedy — it should be given early, so as to produce a Salivation — It has been tried in hundreds of cases and with success — this is a great discovery I owe it to my Master Dr Redman — —
The swelling sometimes suddenly disappears; but if leaves the face, and appears in the extremeties, there is no danger —— the more the limbs and face are swelled the better — I saw one case where the face was so much swelled, that no trace of the nose was seen, and the head of the size of an half bushel, The Remedies for this sudden disappearance

of the swelling are ——
1st Gentle Purging ——
2d Bathing the feet, and hands, in warm water, or stimulating Cataplasms to the feet ——
3d Blisters to the Neck and Extremities ——
4th Opening the Pustules — it is said to prevent pitting — it is likewise of use in abstracting the stimulus of the Matter ——
5th Changing the Linen every day — Dr. Buchanan says that a foul Shirt in this disease is like the poisoned Shirt of Hercules — by the use of these means I have often seen a Cure or to borrow another happy expression from the same Gent.) "A resurrection from the disease" — two or three gentle purges after the cure may be given, and sometimes a vegetable diet, is necessary ——
The next Species is the Confluent — the cure of which we shall now consider — This is distinguished from the distinct, by an early eruption — diarrhoea and Hemorrhages — instead of Diarrhoea, here is sometimes a Salivation, and the eruption is usher'd in by vomiting & Epileptic fits, — which last sometimes prove fatal. this was not delivered by Dr Rush
The remedies are the same as for Typhus Mitior, where-ever of Irregular Action prevails,
1st Bleeding, this should be moderate ——
2d Emetics ——
3d Purges ——
4th Cold drinks, and cold Air ——
But if Typhus Gravior, with great defect of Action

appears. Wine and Bark should be given. in conjunction with Opium, three times a day. cold drinks are highly injurious here — Dr. Sydenham and Morton differd. Cold Air operates Mechanically. and is extremely dangerous — it was falsely supposed as a Specific in destroying the Contagion. which mistake occasioned the promiscuous use of it — it is good where there is excess of Action — but death when it is used in defect of Action —

— or livid spots should be touched with the diluted Spirit of Marine Salt. mixed with syrup — Case of a woman who took Bark and applied it to the Sores. gave them a good appearance —

To the Mild and Confluent Small Pox it may not be improper to add a 3d Species. Viz. The Cuticular — it affects Nurses and those who attend on the patients in the Small Pox. This led me to suppose that the Variolus infection could be taken a second time. but this can never be. where there has been an eruption. with a high Inflamatory fever — I infer that it is contagious from the Small Pox being produced from it by Innoculation — Dr. Sydenham. and Baron Sweiten. relate facts. where there were eruptions without fevers. and afterwards Eruptions with fever; and vice versa —

A Child may be affected in the womb by this disease. Case of a Child in Kensington who was born with a full eruption. on the Skin — the Mother being then in the Small Pox —

The Small Pox in Pregnant women, is always attended with danger owing to the Inflammatory diathesis prevailing in the System ——
With regard to Innoculation I refer you to my Volume of Enquiries; I shall only add a few observations which have since its publication occurred to me ——
1st — I have remarked, that a large wound prevented the infection taking place ——
2d — The success of the puncture depends upon a sharp Lancet. for a dull one will also prevent infection ——
3d — The Small Pox may be communicated from a pustule taken from the Arm of a person in whom the disease was local ——
4th The habit of the body should be attended to, in order to regulate the preparation.
I Innoculated a Lady who came here for her health from Maryland, she was very weak, and troubled with Gouty affections — Dyspepsia &c — I prepared her by Animal food, Morning, Noon, and Night, and Wine; she afterwards took the infection, and had only 12 pocks in a short after she recovered ——
5th — I have seen fresh matter produce the disease on the 5th day, in three persons,
6th — I have seen distinct fresh pustules produced two Months after Innoculation, when the Childs Arm had got well, and in one person six Months after ——

7th — I have known two instances of women passing thro' Menstruation at the time of Small Pox, who got well —— The benefit of preparation depends upon the suddenness of change produced by it —— In the preparation I use Jalap and Rhenbarb. which I think the best. —— Calomel I object to for the three following reasons

1st — It has a tendency to produce Glandular swellings —

2d — It renders the body liable to take Cold —

3d — I think Jalap and Rhenbarb equally effectual — To conclude purges may be fitted to the Constitution and inclination of the patient ——

A tea of Fern tops useful in Salivation

For the Dysentary —

Take half a pint of the best Vinegar & four large spoon=
=fulls of fine salt, or a sufficient quantity to saturate
the Vinegar: when the effervescence is over take one
spoonfull of this solution, add to it four spoonfulls of
boiling water & let the patient take of this prepara=
=tion one spoonfull every half minute untill the
five spoonfulls are got down, as hot as it can be swallowed
A spoonfull of the Nautral Mixture may be joined with it
This is a dose for an Adult. the quantity may
be varied according to the age or Constitution of the
patient. Repeat the dose if necessary once in six
hours — a tea of plantain or mallows may be used
with it. & if a thirst for Cyder should be discovered
it may be safely gratified. The medicine should
not be kept in any leaden or pewter vessells —
It has been found useful in Scarlatina Anginosa — Diarrhœa & Yellow fever —
If Canker in the mouth a tea of sweet Fern tops Cancer Root sweeten with
Honey & add Alum & Vinegar —

For Putrid fevers —

Take 2 large spoonfulls of Yeast every hour or
two, interposing light nourishing food — as Sago &c
with Wine, Lemon & Ginger in it —

If swelling or bloatedness attends (in 6 or 7 days) use
Salaratus & Salt of Tartar

Phthisis Pulmonalis —

This appears to be a disease of the Secerning System — & for the most part a local affection of the lungs — & especially the Bronchial Vessels. When properly formed is attended with Hectic fever —

This disease is frequently the effect of Influenzy — & there is from the begining an increased Secretion arised from diseased upon the membrane lining the bronchial vessells — this secretion has first the appearance of mucous but is continually changing untill it becomes Pus — this appearance is a strong evidence that the disease does not arise from Tubercles, or an abcess in the lungs which are probably the effect & not the cause of Phthisis — Tubercles may be formed by the membrane of the bronchial vessells becoming Corroded — & the matter which is secreted not immediately coughed up insinuating itself into the lungs — & the stagnation of some purulent matter in some branch of the Trachea is what gives the appearance of an abcess

The Hectic fever depends upon a certain state of ulceration & not absorption of matter — It is frequently produced by the exposure of an ulcerated surface to air which increases the action of the Heart all this is evident from the phenomena of Abcesses —

Matter may be lodged in large abceses for any length of time without inducing a hectic fever if it be not exposed to the air — but immediately on opening & ~~exposing~~ discharging the contents, there begins an increased action, & secretion of matter. & the hectic increases — It may arise from any thing that increases the action of the heart, as the matter becomeing acrid & stimulating & even by removing the pressure upon the part as discharging the matter, if no air is admitted — though this may arise from a change in the property of the matter —

M.M. The cure will depend upon the stage of the complaint for in certain constitutions it is incurable. In the early stages of it — when there is only a diseased secretion in the bronchia it may be cured but when this secretion is changed into purulent matter there cannot be any prospect of relief — the object then should be to make early use of those remedies, which will make such an impression as will change the the diseased secretion —

Those when arising from ulcers &c

Those which only increase the action of the arterial system without producing much change as Alcohol, bark &c evidently increases the disea

The debility accompraning this disease does not depend on a want of action, but is induced by a diseased action. It is probably of the indirect kind & must be obviated by such remedies as will have a tendency to remove the stimulus, by changing this for one that is more salutary. A frequent repetition of strong Emetics, as Sulphate of Copper - Sulphate of Zinc &c - & other metalic Salts - likewise medicines of the vegetable kind as Fox Glove - & Blood Root - Opium combined with some Emetics as the Fox glove & Blood root is a very powerfull remedy; & in the beginning of the disease, it may many times be cured with Opium alone - it opperates by suspending the diseased action - the patient should have it constantly with him - & when he feels an irritation in his lungs - or disposition to Cough take sufficient to allay it - Blisters, Sealons & other external applications do not opperate powerfully enough to place much confidence in them - the lower the temperature the more unfavourable it is to Consumptive Patients - which is evident from the increase of the disease - at the approach of winter - the patient should be kept in a high temperature - In winter his room should be kept warm. & in a proper

temperature. which may be done by stoves - better than open fire places & I have thought that strong Coffee. or Tea had a tendency to produce it in those who were predisposed to Consumption - but a more nutritious diet appears to counteract its effects - The consumption commonly makes its appearance between the age of Puberty, & 35 or 40 years - Pregnancy appears to suspend the disease untill about three weeks after - some suppose it contagious & not without some foundation as it frequently attacks those who attend upon their friends who labour under the disease but this may be owing to a similarity of habit &c —— ϕ

N. L.

Gradual progress from forming & discharging mucous, to forming mild pus & by & by a corroding matter which in later stages of the disease forms large collections of matter in the cellular substance of the Lungs - Hectic fever is occasioned by a morbid secretion or ulcerative procep going on in the Lungs - it keeps pace with ulcerative action & no probability of that H. F. is occasioned by absorption of matter but wholly from sympathy with diseased action in the mucous membrane of the Lungs ——

⊕ Women more liable to consumption than men perhaps in proportion of 2 to 1. This is owing to their going so thinly clothed - a very pernicious practice I do not think the drinking of Spirits occasions this disease so frequently as what it is immagin perhaps exercise in open air by giving streng to the system, may be a means of avoiding disease - It must depend upon irritability of action in the system rather than on debili very few die of this disease before the age of puberty - or after 45 ℔ Generally occurs to people about the age when they are in the greatest strength - Upon the whole it appears to me to be a local disease depending much upon Cold - Climate - frosty weather - manner of living - Clothing &c - Women most liable to it during the age of Child bearing - I do not think that drinking tea or Coffee brings on this disea

+ Cal. ℔ Opii in small & frequently repeated do will often suspend Consumptive cough after disea has actually taken place — such. Asthma

When the functions of the body, & mind, are carried on in an easy - pleasant - regular exact manner - it constitutes Health -

Or health may be defined that state of the System in which the excitements and excitability are in an exact Ratio to each other - & both equally diffused through every part of the body & mind -

This definition admits of considerable latitude - it excludes strength altogether from health - The most effeminate citizen who cannot bear the Rays of the Sun or a northern blast - may be equally healthy with the most robust hardy working peasant who can stand all Climates & Seasons without inconvenience -

If health consisted in the quantity of strength a man would be always more healthy than a child - which is not the case -

Disease consists in an irregular, unequal excitement & morbid action in some part of the body or mind —

Debility is the predisposing cause of disease I do not rest here wholly on Physical. but moral Evil also —

Evil I consider to be of two kinds — Physical & Moral — Physical Evil exists in the Human body & on the Globe — Moral Evil has its seat in the mind of Man — Evil in the first instance would appear to be a positive cause — but is merely the effect of a negative cause as it appears in the Human body —

Debility is the cause of every Disease & Error Loci, or irregular motion is the effect —

Evil then depends on derangement — Is nothing introduced into the System — But it may here be asked, are not Miasmata Contagion — Noxious Effluvia &c — positive Evils? No they are not — they induce disease

only from Error Loci - Miasmata, Variolous Matter &c is not offensive to Bowles & in the stomach of the Human subject, it is also inoffensive - they act by an undue mixture of things not related -

A piece of bread in the Wind Pipe, will produce a most violent action, & even death - yet who from that circumstance will cease to eat Bread? Or who will suppose it to be of a deleterious nature? It was intended for the nourishment of Man the evil arises from its Misplacement -

Dr. R. says that the Miasmata of Yellow Fever, affords the most cordial nourishment to Vegetables & to the Human Subject they are only Evils when in excess - He says it had a cordial effect on his System when opposed by a low diet - It supplies in many cases the want of Aliment - Be not supprised at this assertion Opium is a much more deadly poison than this Miasmata - it proves almost certain death, when taken in a dose of sufficient force - but there are thousands of escapes from Yellow fever -

On the contrary Dr. Mead has happily called it, Magnum Dei Donum -
The same may be said of poisons of the Animal - Mineral & Vegetable Kingdom - they are medicinal in small doses, but death when used in excess
What is poison to man is food to animals they produce their ill effects by Error Loci.
Moral Evil seated in the mind, like Physical Evil, consists in debility - it is of a negative nature - & consists in the absence of the strength or power of the mind -
Mr. Edwards supposes that when man fell there was an abstraction of Divine power from his will - Moral Evil then depends on want of strength in the will the
of the mind - Just as Physical Evil depends on want of strength, or debility of the body
innumerable are the effects of both - Vices of the mind & diseases of the body, cannot be numbered in all their forms & combinations
- I shall here again observe, that debility is the universal predisposing cause of Disease. -
- that in debility there is an increase of

Excitability - or an increas'd disposition to be acted on by Stimuli

3dly - That debility inoites morbid action. or a diseas'd species of Excitement -

This is not a new opinion - Hoffman hints at it - when he says - "Atonica Gignit Spasmos" - this is merely what he meant by it -

The Electric rod does not more certainly inoite the Lightning, than debility does Morbid action & in this irregular or wrong action disease consists - Excitement may be excessive - yet if it be regular, no disease exists - Every disease therefore consists of unequal excitement - & the Healing Art consists in equalizing the excitement - & healthy excitement takes place -

It was before observed that diseases are always partial - there is no disease which affects every part of the system at the same time - There is always in the system, some weak part, which most readily takes on morbid action, & becomes the seat of disease -

The seat of disease varies according to the opperation of the remote causes — in people previously in perfect Health — from this cause we see Boys frequently attacked with Rheumatism, after playing in the evening air, by over exercising their limbs in Running - Wrestling &c — the limbs are more debilitated than other parts of the body - & are therefore the natural seat of disease —

5th The irregular excitement shews itself differing in force, velocity, & motion - This is sometimes excessive; as in Tetanos. the force of action is great — sometimes in excessive pain — This as was before observed is a symtom of wrong action - The disease is always accompanied by pain as in Epilepsy - Pulmonary Consumption it is no more necessary to disease. than Heat & thirst are to fever — In diseases of the bowells, there is more pain, than in diseases of the vessells simply, as they possess little sensibility, & much Contractility —

Dr. Rush asserts, "there is but one fever in the world" & that consists, in irregular excitement, or morbid

& wrong action - whether this be seated in the blood-vessels - Nerves - Alimentary Canal - or Lymphatics - still He maintains there is but one Disease - All diseases have one Proximate Cause. (viz) wrong or convulsive action - In fever this is seated in the blood vessels - It has been said that Obstructions are disease - but they are the effects only of disease - & may prove a cause of disease by reacting - These may be called disorders or consequences of disease - thus the water effused in Hydrocephalus, is not the cause of the disease but the effect of the diseased action of the Brain

In like manner the hardness in the Liver which succeeds Hepatitis, is not the cause, but the effect of inflammation in that viscus - where these disorders produce death - it is by a reaction of the System -

There are 3 links to one Chain in

I. Predisposing debility -
II. Morbid action - or Irregular excitement
III. Disorder the effect of this Action -

Dr. Rush objects to Nosology - Because -

1st It is erroneous - - -

2d - It is impracticable - -

3d - It is injurious to the practice of Physic -

1st It is erroneous - because diseases cannot be so accurately divided into Genera - & Species - as their symtoms change constantly into each other - error & perplexity must arise from this source - thus Convulsions & Madness often alternate - fevers change from Intermittent to Continued - from common - continued, Billious to Typhus - & even Pleurisy, frequently terminates in Typhus fever, or Pulmonary Consumption Plants & Animals may be classed into Genera & Species, for they never change into each other - Whoever heard of an Ox changing into a Lyon - or an Oak tree to a Thorn bush? - But the symtoms of disease constantly vary -

2d - It is impracticable to class diseases as we do plants - they change their seats so frequently & all their appearances - that we might as well pretend to class into Genera - Orders & Species a

Storm, accordingly as it is accompanied by Lightning & Thunder — by rain or without — with or without wind — with Hail or Snow or without them — as to class diseases under different names as they appear in different parts of the body — Phrenitis — Gastritis — Enteritis — Hepatitis & Nephritis frequently alternate — & I have known many cases where a pain in some of the Viscera alternated with a pain in the calf of the Leg —

The predisposing cause of all the above diseases is uniformly debility — & this debility may be either direct or indirect — & the exciting cause must be an Irritant, or Stimulant. —

The symtoms of fever may vary according to several circumstances of the exciting cause, whether it be eating or drinking — Heat or Cold — yet the disease remains the same — again the same exciting cause will produce different Symtoms as the System is predisposed to any particular Symtoms ——

3ly — Nosology is injurious to the practice of Physic — In the first place. it prevents our curing disease in its forming state — the old Nosologists never would use remedies in the first days of fever, till it had put on its type, (as they called it) So that they could class it, in its proper Genera & Species — Much of the art of Nosology depends on giving a disease its proper name — But I should have no objection to the Identity of disease, if we were acquainted with a specific for each disease, according to the Nosological order — But we know that Medicine operates upon general Principles; & we are no better able to cure a fever after carefully ascertaining its Tertian, quartan, or quotidian form, than we were when we barely knew that it was an Intermitting fever — I would not have you get an Idea that I intend to lessen the care of a Physician, by this inattention to the name of the disease — but on the contrary, we should watch carefully every change of the disease & direct our medicine according to the state of the System — as indicated by the Pulse —

Furthermore, in the first place all dis-
-eases come on in the same way; by
predisposing debility, & if we wait till
the symtoms appear we loose our chance
of preventing the disease, which many
times may easily be done by a gentle
stimulus in its forming state —
The languid debility which a person feels
before he is attack'd by fever — Gout, & other
diseases, is readily removed by immersing
the feet in warm water — a gentle sweat &
which equalizes the unequal excitement —
Thus by carefully attending to the predisposing
cause we may strangle disease, as it were
in its forming state — I have many times
prevented a course of Billious fever, by
giving an active Cathartic, at the commen
-cement of the promonotory symtoms — this
operates by clearing the alimentary Canal
of the exciting cause — likewise by equalizing
the excitement —
Our remedies for the prevention of disease, after

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the pronomotory symptoms - should vary in force according to the importance of the part attacked; for we know that more danger is to be apprehended in diseases of the Brain than of other parts — also of the Trachea, which is more dangerous in Cynanche Trachealis, than in Pneumonia - we should be more copious in our depletion & stimuli, when vital parts are affected than when disease attacks part not so immediately essential to Life — —

Disease appears in Six different forms. (viz)

1st. In Convulsive Action — as in Epilepsy —

2d. In Spasm - as in Asthma - spasm is either Tonic, or Clonic, the first is constant as in Tetanus the second is alternate ——

3d. Form of disease appears in great Heat, either external or internal —

4th. In Itching on the Skin, under the arms — in the Pudenda - anus — &c

5th. In a kind of Sparks, which is sudden & severe, & goes off in a few minutes as in the Aurea Epileptica ——

6th In what Dr. Rush calls Suffocated excitement, where all motion, and sensation ceases — This is the worst form in which disease can appear — It occurs in fevers of the most Malignant kind. In these cases the miasmata or Contagion acts with so much force, as to destroy the excitability of the system, prostrating it below the point of reaction —

This Suffocated excitement appears to have its seat in the blood vessells — it is this form of disease which kills people suddenly when walking in the Streets, or about their common business — during the prevalence of Malignant Epidemicks.

Each of the above form of Morbid action appears occasionaley in every part of the system. tho they each appear to have peculiar seats. which they commonly occupy. thus the Itching which I mentioned as the as the 4th form of morbid excitement most generally occurs on the Skin — Pudenda, & Anus. but it is sometimes a symtom of the Gout ——

Spasm usually occurs in the Muscles, & blood vessells — Morbid action like pain varies in form according as it is seated -
Thus pain is acute in Membranous parts - dull & heavy in Parenchymatous parts - Lancinating in Muscles — & Gnawing & boring in the Bones - Now we know that pain is an Unit in all these varieties — It is absurd therefore for Nosologists to say each of the forms in which morbid action appears, constitutes a different disease 'tis as much a unit as pain —
I exclude coldness from the form of disease action. Coldness depends on the abstraction of excitement, & when it occurs in acute fevers. it is removed by Bleeding —
Inflammation I consider as an effect of Morbid action - it is a 2° inferior degree of morbid excitement — In it there is Error Loci — this always occurs in inflammation tho it is not the cause of it — In the most violent morbid action, Inflammation does not take place — Morgagni mentions several

Cases
— of death, from Cholic where there was no
inflammation — this is the 6th. form of Morbid
action. or what Dr. Rush calls, suffocated
excitement, where all motion & sometimes sen-
sation ceases — It occurs in Hydrophobia

This doctrine differs from Dr. Browns.
He supposes all diseases to consist of debility.
I deny debility to be a disease at all.
— it is merely the predisposing cause of disease.
Browns division of diseases into Sthenic
& Asthenic. I deny that any diseases are
Asthenic — Asthenia is merely predisposition
Dr. Brown places diseases in diffusion
of excitement & excitability over the sys-
tem. in this I suppose Health to consist —
He endeavours in all cases to overcome
debility — I to equalize excitement —
& excitability, & in some cases to diffuse
excitement & prevent its being concentrated
in any part —
I have only to add to the proximate cause
of disease that it appears —
1st. In the Blood vessels —

2d. In the Nerves
3d. In the Muscles
4th. In the Lymphatics
5th. In the Bowells - but it is still an Unit.
- still morbid & Irregular action - appearing in one of the 6 forms, that have been before mentioned —

Dr Rush compares Nosology to a spacious Building consisting of an hundred apartments, each of which is opened by a seperate Key - but the principles which he taught he has compared to a Cabinet equally spacious & commodious. consisting of an equal number of apartments - all of which are opened by a single Key —

Having established (as I hope) that debility is universally the predisposing cause of disease - that the proximate cause is morbid excitement I proceed next to enumerate the remote causes of disease —

They all act either by adding to - or extracting from the excitement of the System - inducing

of course direct debility — this is an important part of our Pathology — without a knowledge of the remote causes of disease, we should be much at a loss in many cases — both in the prevention & cure of Diseases — Thus we find it diffficult to cure a person of a disease unless we remove him from the remote cause —

If the Miasmata from stagnant water, or a marshy Pond has been the remote Cause of disease, removal from the vicinity of such water or Marsh will prevent & much assist the cure of the disease —

I believe it is from the constant opperation of the remote cause of disease — that Billious Intermitting fevers on the borders of Lakes & stagnant waters are more Mortal, than the same form of fever, in places not constantly exposed to this Miasmata — & this is probably one cause why contagious fevers are more fatal in Cities than in the Country — Citizens are continually exposed to the Miasmata & effluvia of infected Houses & people — Remote Causes of Disease' see page 12th

Heat is an universal Stimulus - it acts on all animals & vegetables — but different animals require different degrees of Heat - The temperature of 32° or even lower - is perhaps as stimulating to some animals as 75° to Man — Heat & Cold are relative terms - the extremes of both are unknown when it is any considerably beyond the point of 95° it shows its effects in the arterial System — It induces a languor & debility accompanied by an increase of excitability - or an increased disposition to be acted on by Stimuli — It never acts as a cause of fever where it has been long continued — thus the West Indians being constantly exposed to the heat of a vertical Sun, feel no inconvenience or languor from the temperature of their atmosphere 2d. Heat acts on the Brain, when accompanied by the direct rays of the Sun - it induces what is called insolation — sometimes it brings on Syncope & even death —

It sometimes acts in a less immediate way - shewing itself in Spasmodic dis- -eases - Inflammation - Sleepiness - Cold Sweat - convulsions & death — —

3d. Heat acts on the nerves inducing Convul- - sions - Syncope & Hysteria - hence these are very common in hot weather - & in warm Climates — Wakefulness is often the effect of Heat —

4th — Heat acts on the Muscular fibres - in- - ducing languor & weakness - a disposition to involuntary motion

5thly — Heat acts on the Stomach & Alimentary Canal inducing in the former excess of Appetite, & in the latter it disposes to Dysentary - & Cholera Morbus —

Physicians who have visited the E. Indies - tell us, that people from this country, & Europe when they arive in that Hot Climate, have an excessive appetite - which many of them indulge & pay for it, by suffering some of the diseases of that Country — — —

6th — Heat acts on the Skin producing a profuse sweat - this is of a saline taste & smell - & a great degree of Heat produces dryness of the Skin - this occurs sometimes in labouring people - during Haying, & Harvesting - they never give out (as the phrase is) till they cease to sweat — it also induces eruptions on the Skin - this is what is call'd Prickly Heat, this is many times brought on by exposure to the rays of the Sun - A discharge of the white colour of the Skin is an after consequence of Heat — & a brown colour is acquired as in Indians -

7th — Heat invigorates the Venerial appetite - hence the early Marriages & fruitfulness of the Eastern women -

8th — Heat acts on the Blood disposing it to putrefaction - this is in Hot Climates prevented by the bile -

Billious diseases are more common in warm weather, than in Cold - from the redundancy & acrimony of the bile — causing diseases of that type —

- but this may in a great measure be attributed to Marsh Effluvia — It is from this cause billious fevers are most prevalent in hot climates —

9th Heat operates on the Eyes - hence Opthalmia Gutta Serena, Cataract, &c occurs most frequently in warm Climates — During the year 1793 Dr. Rush observed that Opthalmia was very prevalent in Pensylvania, from the heat, & dryness of the season

10th Heat impairs the faculties of the mind. causing a weakness of the memory - and understanding — It is from this reason that so great a Clays of the people in hot Climates are early reduced to slavery — lastly. Heat is less unfriendly to old people, than cold. hence the antient Romans in their old age removed to Naples & more warm climates where they prolonged their lives, without the inconveniencies of old age - & it is said the modern Portuguese follow this example Sr. Wm. Hamilton informs us that they migrate

- to Brazil as they advance in life. Avoid many inconveniences of old age. from the superior heat of this Climate —
The Stimulus of heat in these cases counteracts the debility, which they would otherwise feel from a languid circulation in the extreme vessels —
Old men should never migrate to cold countries
Heat when intense is suddenly fatal to old Men —

Thus far we have considered the effects of heat acting on the body, in ordinary circumstances; but its action varies, if the System has been previously exposed to cold; - or rather acts more certainly & with more force inducing preternatural excitement —
The sudden abstraction of heat, by repelling perspiration predisposes to fevers — this is more especially the case if the weather be moist. Uniformly dry weather is Healthy —
Changes increase much the ill effects of Heat & cold. this is the reason why Inflammatory diseases are most prevalent in Spring & Fall
The warmest Summers & coldest winters, if uniformly so — & either uniformly Wet, or Dry, are the Healthiest

If such are the effects of Heat which have been enumerated - it may be asked why was Man originally placed in a warm Climate — & it was under the invigorating Sun of Egypt that the arts had their origin and flourished - & it is in the Hot Climates, that the greatest instances of longevity have been observed? I answer, when Men govern themselves by reason & experience no other aid is necessary to attain Longevity —
The aborigines of this Country by their simple diet & dress are not subject to diseases so fatal to Civilized Life — In Affrica people grow old from this cause — their Sun is fatal to Europeans whose mode of life differs so materially from theirs — the same observations obtain in Jamaica - their climate is fatal to Europeans who resort thue unless they accommodate their manner of living to the Climate — In warm countries the Inhabitants live according to Reason —

Mr. Townsend informs us that the Spaniards who live at Madrid by keeping close in the House in the Heat of the day, and accommodating themselves in diet & dress to the weather, feel no inconveniences from the heat of the Summer —

I conclude then, that most diseases arising from heat are the effects of an error, either in diet - dress or the exercise of the mental faculties — except such as are produced by the sudden changes of the temperature of the air - & these last cannot properly be called the effects of Heat —

The effects of Heat are different as it is accompanied with moisture & dryness —

To obviate the dryness of the air in Arabia. travellers who are to pass over the deserts of Nubia fill a sponge with water - thro which they occasionally breathe & are much refreshed — A cup of water placed on a stove in a close room obviates the unpleasant effects — It would seem as if a certain portion of water was necessary to Respirable air

The effects of Heat, when joind to moisture are seldom morbid, when the Heat is less than that of the body —

Wintringham has observed that Summers uniformly Rainy & moderately warm are the most Healthy —

Cold; is a negative quality - it acts only by abstracting the stimulus of Heat — Cold has been supposed to act as a stimulus but this is an error which has arisen from the increase of excitability wich occurs in debility brought on by Cold — its action is uniformly Sedative — Its sedative action is evident

1st. From the debility induced by the action of cold on the system - Labourers & Travelers in cold weather bear witness to this —

2d — I infer it from the slowness, weakness & even absence of Pulse - followed by weariness - Sleepiness & death in persons exposed to it — The pulse beats only 40 strokes in a minute in Greenlanders - & this must clearly be the effect of a sedative operation —

3d — From the effects of the operation of cold

being similar to that of Bleeding & purging, & from its effects in diseases inducing direct debility as in Small Pox & other inflammatory diseases - in which it reduces morbid action — It has been said that cold acts as a tonic in fevers, by bracing the system in Hot weather — but cold air in these cases acts merely by abstracting the stimulus of Heat, which induces indirect debility This removing of indirect debility - or rather preventing it - has been mistaken for the effect of a tonic action —

To illustrate this, let us suppose the healthy point to be 98°. now suppose the indirect debility produced by Heat to be 95°. the cold air by abstracting 20° reduces the system to a healthy point - from its indirect debility

Let us now attend to the opperation of Cold on the different parts of the system —

On the Arterial System cold induces debility & accumulated excitability & increase of the irritability of the muscular fibres - predisposing predisposing them to all kinds of fevers

It also induces painfull sensations in the Breast - this frequently experienced in very cold weather —

Cold induces an indisposition to motion in the organs of voluntary motion - Cold renders sweating difficult & by stopping perspiration causing an increased flow of Urine —

Cold induces a paleness on the skin, and when carried to a greater degree, a red colour of the skin appears nearly similar to that of Petechiæ in dead bodies — it is produced by the deadness of the vessels which allow the blood to rush into them & gives the red colour — In a still greater degree it produces Gangrene, or a total disorganization of the part —

Cold acts most powerfully during Sleep - or in the night - Soldiers - Sailors and labouring poor are well acquainted with this fact — Nautical writers notice the death from Cold in shipwreck generally occurs in the night — hence most diseases come on, in the night —

Cold has a curious opperation on old Ulcers. at times making them worse, when they were nearly healed ——

These are the effects in ordinary circumstances — but by alternation with Heat, they are increased — It predisposes to Billious fevers when it succeeds the heat of August —

The abstraction of 20° or 30° of heat destroys the equilibrium of excitement & excitability. Thus invites morbid action —

Cold acts as a Sedative in stopping the perspiration, which is the effect of indirect debility from Heat. Epidemic fevers are increas'd by cold, unless it be intense enough to destroy the Miasmata which produces it — this was the case with the Yellow fever in Philad^a — It opperated by suddenly abstracting Heat — destroying the equilibrium of excitement, & excitability. Weather which is uniformly cold, is healthy. In Canada disease is scarce known, during the cold weather — but on the return of warm weather diseases return ——

Mr. Guthrie, makes the same observations of Russia

A Catarrh is unknown in that country dur-
-ing the cold weather — the same is said
of Norway - Inflammatory fevers never
come on till spring — but in these cold
countries, we are told Inflammatory fevers
run on to the Gangrenous, or putrid state
-in which the system does not react —
Heat succeeding cold of long duration caus-
-es Gangrenous, or highly malignat fevers
Van Sweiten takes notice of this fact -
The Plague he says, is often excited in this manner
When people live by reason & experience
in the cold climates, & clothe themselves suit
-tably, they experience no ill effects from the Cold
In Canada the cold is not so sensibly felt
as in this, & more Southern states owing
to the Inhabitants taking greater precaution
against the influence of it — they have their
windows double — the walls thick to their
Houses - & never venter out of the house
without furs or thick Clothing —
According to Mr Guthrie, the Russians suffer
less from Cold, at Home, than when in the more southern
parts of Europe —

Cold, is perhaps, more detrimental to ~~Health~~ the life of man, than any other cause. I have known a great many people discard from being too thinly clothed & from too little bed clothes, but I never knew an instance of disease from being to well clothed — People who endeavour to render themselves insensible to cold, resemble the man who endeavour'd to teach his Horse to live without eating. just as he got learned he died —

The custom in our country of letting Children go barefoot, & thinly dress'd, is a very pernicious one & we ought in all cases to bear testimony against it. It lays the foundation of diseases, which if not immediately fatal, impair the constitution, & must destroy it at length —

The climate of the middle States & of Middle Lattitudes, is not necessarily unhealthy. the changes answer some useful purpose. but they require that we should accommodate our dress, & habitations to them — Moisture increases the sedative effects of Cold. as it assists in carrying off the heat of the Body —

In England the temperature of 30° is more sensibly felt, than 10° at Philada owing to the moisture of the air in the former place.

The Russian Soldiers who spent a winter at Plymouth, declared they felt the cold more severely, than they ever had done in Russia - owing to the moisture of the air.

The coldness of the climate in Holland, is owing to the moisture of the air - this renders it necessary for the Inhabitants to put on winter clothing, in the evening of their warmest summer days -

Cold acts more or less certainly as it is applied to the whole or part of the body - thus cold feet more frequently induced a Catarrh, than a more general exposure to cold - the cold hand of a Physician on a patients pulse, has been known to produce Rigors - A current of air on the neck of a person which comes thro' a broken pane of Glass often produces Inflammation, & stiffness of the Neck -

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Cold does not act as a stimulus, in these cases, but, but it abstracts the stimulus of heat — now it is a fact that the abstraction of one stimuli, is always followed by an increase of an other — # this stimuli may be nothing more than the blood — the equilibrium being destroyd between the excitability & excitement, disease is induced — hence the reason why the partial application of cold, acts more powerfully, than general, as it tends more to destroy the equilibrium — Hence I never prescribe for a patient with a Chronic disease without recommending to keep the feet warm. The feet & the mouth are the avenues for almost every disease to which the human body is exposed. It is said Dr. Sydenham left a posthumous work with this injunction — "Keep the feet warm & the Head cool, & you may bid defiance to Physicians" With respect to keeping the head cool, perhaps he had particular reference to the immoderate

By the abstraction of the usual stimuli, the excitability of the system is increased, & becomes susceptible to the operation of weak stimuli —

use of ardent spirits in "Heating the Copper" as it is called, which is too often the cause of disease —

The same degree of cold, acts more or less powerfully; as it is accompanied with windy or calm weather - it is observed that more Catarrh's happen after a spell of windy cold weather - than when the weather is calm — Wind acts by conducting off the heat of the body —

Thus we have considered the effects of the sensible qualities of the atmosphere, as far as relates to Heat - Cold, Moisture, & Dryness we go on to consider the variety of these effects at different seasons of the year —

April is very fatal to patients labouring under Chronic complaints, especially Pulmonary Consumption — June & July, are generally healthy months in America, & was formerly in England - Sydenham observed that the diseased of Winter, spend themselves by June - & those of Summer by Febuary.

Hyppocrates made the same observations in

- dis-

different words - He says the diseases of Summer are seldom cured till mid-winter & the diseases of Winter, till mid-summer - Dr. Rush says he has uniformly remarked that most fevers bear bleeding till May & in winter till Feb.y. they partake of the Intermitting & Remitting type —
There appears to be a kind of Solstice in diseases. they stop in June & July as it were to take breath - or to change one set of destroying weapons for an other —
Moisture influenced the diseases induced by cold & night air, is from this cause unwholesome — Mr. Bruce in his travels informs us, that his Sailors at the approach of night, became cowardly, as the moisture rendered them chilly — Mr. Bridome tells us that Catarrhs are almost always caught in Spain, by exposure to night air —
The evening damps is owing to the precipitation of the dew, from the upper regions of the Atmosphere

The Yellow fever during its prevalence, Dr. Rush informs us, was more frequently taken during the evening, than at any other time. Sickness & Mortality continue during the prevalence of yellow fever, till a severe frost - or a very heavy rain - either of which check it - the frost must be sufficient to form Ice, the common hoar frost is insufficient to check, but rather increases the disease - Slight rains have the same effect - as moisture keeps to diffuse in the atmosphere, Miasmata, & noxious Effluvia #

Let us next proceed to the insensible qualities of the air, as the remote cause of Disease -

They consist of certain impregnations of the air And. 1st. of Marsh Effluvia -

This is a fruitfull source of disease - for the production of Marsh miasmata, from putrefying animal, & Vegetable substances. 2. circumstances must coincide (viz) Heat & Moisture

The reason why a slight frost increases the yellow fever is that, the cold condensed the air, & concentrated the effluvia, as the Doors & windows were shut, when it was cold; & prevented the contagious effluvia, from being diffused in the air -

The heat must be intense, & continued for some time
Moisture is necessary, as no exhalation can
take place from dry ground - but it is also
necessary that the moisture should be moderate
- if it should cover completely the surface of
Marshes, no exhalation can take place, ex-
- cept pure water — for the production of Marsh
effluvia. Moisture, & not liquidity is requisite
Dr. Rush mentioned that some years ago
the marshy grounds at the lower end
of Philada was immundated in april,
Many fishes, & much animal & vegetable
matter was deposited on them — but no sick
- ness accrued - the heat was insufficient to
produce putrefaction — Some years after
a similar inundation took place in June
when the weather was cool — from the feeble
opperation of the rays of the Sun, Dr. Rush
predicted that the season, would be unusually
healthy — which was the case —
Many facts could be adduced to prove, that no
morbid exhalation takes place from bodies
of water — Mr. Bruce in his travels observed uniformly

- that in the rainy seasons where the marshes & morasses were covered with water, the countries round about were healthy — Dabzell in his account of Cayenne observes that when a sufficient quantity of rain fell to cover the Marshes completely with water the negroes were remarkably healthy — but if a sufficiency fell to moisten them without completely flowing them them disease uniformly occurred —

This fact is observed in the state of Delaware — that whenever rain falls in sufficient quantity to cover the marshy grounds — the neighbourhood of them is always healthy —

In Seasons uniformly dry, Intermittents are not frequent, on the borders of marshy Grounds, but healthy seasons we find depend on slender circumstances —

There are no fixed principles with respect to the quantity of rain which falls, & which render low grounds healthy, or unhealthy —

The direct rays of the Sun are necessary for Exhalation of morbid miasmata — the swamps which are sheltered by Pine or Cedar trees never emit offensive Effluvia —

Marsh Miasmata, is said to arise from putrid vegetables principally — Animal putrefaction does not generate it — Animal substances often petrefy in open air, without producing disease — A certain smell arises from these putrefying substances, which is designd like the Rattle of the Snake, to warn us of our danger — & direct to sources — which if not prevented will generate disease — but no smell is perceivable from Marsh Effluvia —

If putrefaction of animal offals, were sufficient to generate Disease. the largest Cities on the globe, would long ago have been depopulated — Stables would not be permitted to be so near our dwelling Houses — or Privies & the like in our yards — It is not uncommon in all large Cities for the Livery Stables to be joined immediately to the dwelling Houses — or to be included under the same roof —

The last is, that volatile alkali is disengaged in the putrefaction of those substances which neutralizes any morbid Effluvia that might otherwise exhale —

There are a variety of vegetable substances

- which produce disease when in a state of putrefaction — as Putrid Cabbage — Putrid Potatoes — Putrid Pepper — Indian meal Putrid Onions — Putrid Coffee. this genera- ted the yellow fever, twice in Philad^a — & likewise in Kingston Jamaica — Hay & Straw, have severally been known to produce disease — —

I have mentioned, the principle sources of disease, from impregnations of the At- - mosphere; & shall now ask, on what part of the body do these effluvia act? — They produce Indirect debility in the Brain - this in some cases is so violent that Syncope & even death, have been the first operation of the Apoplexy has been thus induced — — They appear to act next on the alimentary canal, & stomach — hence the Cholic. Diarr- - hoea — discharge of bile — & other diseases of the Intestines — this teaches us the propriety of exhibiting Emetics, in the first stage of dis- - ease from these sources — —

The Liver is more or less affected in all cases of fever from these sources — & there is often congestion of Bile in the Gall Bladder — The morbid action in the Liver & Inflam^n causes an alteration in the bile, both of its Secretion & Excretion —

The Spleen frequently enlarged & indurated, forming what is vulgarly called Ague Cakes — this is a secondary consequence & Congestion of blood in that viscus during the violent action of the blood vessells —

Dr Rush supposes the Spleen to be a waste gate to the System, to retain from the circulating mass of blood. a portion of blood during the violent exercise of the body. & at all times when there is an increased action of the blood vessells — It is from this cause we account for pain in the region of the Spleen when we run &c —

During the course of Intermitting fever, the Spleen is frequently distended with blood. so as in a great manner to destroy its action. the coagulable Lymph of the blood is thrown out, & not taken up by the absorbents this is the cause of the Ague Cakes — the Spleen loses its power of action upon the blood. by being frequently overdistended. producing debility of that part —

3d. It acts on the Nervous System, and Brain, producing Convulsion - Head ach - apoplexy - Palsy, Madness & Death - Hence we often find billious ~~diseases~~ fevers, ushered in with Convulsion - pain in the Head & delirium - & delirium is a common attendant of billious fevers - & this is frequently an early symtom -

When these miasmata act on the alimentary canal - they induce debility - Diarrhaea, and Dysentary -

They have been said to act on the blood, producing that state which has been called dissolved blood - but this dissolution of the blood is the effect of the action of the blood vessells - which as it were pulls it to pieces - this has been very erroneously ascribed to putrefaction by Sydenham & other old writers; but Sydenham however observed that this kind of blood occurs most commonly in cases, where miasmata have been the remote cause -

These miasmata arise from the earth in the Morning they are rarefied by the heat of the Sun, & ascend to the highest part of the atmosphere - In the Evening they are recondensed & are precipitated

to the surface of the earth — So that the morning & Evening are the only times they act —
These miasmata act on the Lymphatics, and Glandular System —
On the skin, producing Eruptions - Carbuncles &c
We proceed next to speak of animal Miasmata & Human Effluvia as the remote cause of disease
However mortifying it may be to the pride of man, yet it is a fact that he is under the necessity of emitting an effluvia which engenders disease — they are derived from the following sources — first want of cleanliness - or wearing apparrel too long without washing — Linen requires to be washed & changed more frequently than Cotton, in armies — as the cotton more readily permits the escape of the Effluvia, & of course does not so long retain the causes of disease In 76 it was produced in the Rifle men by their Rifle Shirts —
2d — Confinement of numbers of people, in close rooms — hence disease is so frequent

- in Jails - Hospitals - Prison Ships &c —
- the disease from this ~~cause~~ source is gen-
- erally called the Jail or Hospital fever —

3d - From putrid animal diet - this is fre-
- quently the cause of noxious Human
effluvia in armies - Prisons &c.

4th Want of aliment, is another ~~frequent~~
fruitfull source of Disease - it renders
the fluids of the body acrimonious
& breath fetid - from this reason famine
& pestilence go together —

Shakespear, describes Famine, & Pestilence
as "Dogs crouching for employment, at
the feet of Cesar, when girding on his Sword

The following circumstances; deserve consideration
in attending to the history of Human Miasmata
In the first place, it is more frequently generated
& is more active in the winter, than in the
Summer season; this was remarked during the war
the oppreration of the Hospital & Jail fever was
much milder, during the Summer than Winter
The reason probably is, that the doors & Windows
are kept shut during cold weather, & the Miasmata

stagnates & becomes more active —

Dr. Rush has informed us, that in the house of Employment in Philada. which was the Hospital during the war in the year 1777, the Jail fever occurred & raged in April — the weather became warm in May, & the doors & windows of the house were opened. the miasmata dissipated & the disease entirely disappeared — On or about the 20th. May however a cold spell commenced the doors & windows had to be closed — the consequence was, the fever came on again with fresh vigor: it destroyd 2 of the Surgeons — & one mate — & increasd in mortality, till the weather became more warm, so as to admit of free ventilation to the sick rooms —

I have observed when Typhus fever prevails in winter, it is more general in the families where it prevails, & likewise more fatal — Nautical writers mention circumstances corroborative of this fact — that ship fevers are always more violent, as they approach the coast of Great Brittain; & uniformly subside when they get near the coast of the west Indies — the Sailors in the former case remaining below Deck

- to avoid the cold. moist air - & as they approach the warm climate of the west Indies. they remain the most part of the time above Deck & thus enjoy fresh air in the disposition of Cold likewise to concentrate these effluvia is evident in yellow fever - this disease is never contagious in the West Indies, & rarely so in Philada till Sept. when cases of contagion, occur from the doors & windows being shut up, & the Effluvia concentrated in

A second circumstance in the history of human miasma deserving attention is. that it adheres to Cotton & Woollen clothing for a considerable time in this teaches us to place the beds of our patients in Typhus in the middle of the Room - remove the curtains from the Bed. to prevent the miasmata from adhering to the curtains or the walls of the House - this answers likewise, another valuable purpose in admitting fresh air to the patient, which conveys off the effluvia of the Body, & redundancy of Heat in

This is no new fact. The Leprosy of the Jews was formerly so Malignant, & contagious, as to adhere to the walls of the houses, for a long while — It is a fact, that the Contagion of Typhus does not adhere to white washed walls - or to floors of Earth — Count Saxe in his reveries, mentions that ground floors should always be prefer'd in Soldiers Huts He never allowd them cover'd with boards or any other substance for this reason - Sir Military Hospitals in D. Rush made the same observations in the Hospitals during the american Revolution; He found those military Hospitals which had ground floors, & even open roofs were most healthy during the prevalence of Typhus Fever A third circumstance, to be attended to, is that these miasmata, act most powerfully on a debilitated subject, & seldom affect people where there is any stimulus constantly opperating — Hence pregnant women - & people affected with sores - are seldom affected with Typhus —

In the former the stimulus of distention - in the latter the ulcer prevents the operation of the disease. but if the ulcer be healed - or woman delivered they are liable to the disease -

The Inhabitants of Asia, used to keep open, constant Issues during the prevalence of the Plague - & in many cases it prevented an attack of that Disease -

This circumstance of debility, favouring so much, the operation of these Miasmata, shews us how usefull it is, to remove our patients, from the neighbourhood of the miasmata, as soon as they recover - for their weakness will render them liable to a relapse, if exposed to its influence -

After amputation, or any capital operation patients are very liable to Typhus -

4th. The violence & certainty of their operation is increased by disposition of the mind - as Grief - Fear - or the like debilitating passions - This is one great reason why Pestilence always attends War - the Soldiers are under the constant op-

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Operation of Greif & Fear, from being dragged from their families & friends, & hourly in danger of loosing their lives —

What is the name - or rather what is the nature of the disease, produced by Animal Effluvia?

It is called slow Nervous Fever - Jail Fever. Hospital & Ship fever - & by Cullen. Typhus Mitior. These are all one disease - It is produced by great debility - which is chronic -

It comes on gradually, frequently without being preceded by a chill - or Stupor - or any, very observable premonitory symtoms

Its action is first; on the Arterial System - which it quickens & renders irregular - It acts also on the Stomach & Alimentary Canal - exciting vomiting of Bile - & voiding it p. Anum in a few cases, tho this is not common -

The Bowells are frequently regular - no Diarrhoa or Costiveness occurring in Typhus - but when a Diarrhoa does occur it is generally a bad symtom. It is frequently attended with Abscesses in different parts of the body - Buboes - Swelling of the Neck - Arm Pits &c - &c —

The Typhus is inflammatory in proportion to the strength of the patients previous to the attack of the disease — Dr. Rush says he cured the Officers of the American Army, by Bleeding - Purging & the antiphlogistic regimen — but to most of the soldiers he gave Bark on the first attack of the disease —

When Typhus Mitior occurs - it may be distinguished from the diseases caused by Marsh Miasmata -

1st. By prevailing at all seasons of the year - but more especially in Spring & Summer - frequently in the Winter — It is perhaps the most fatal when it occurs in the Winter from the reasons before mentioned - but the diseases from Marsh Miasmata prevails principally in Autumn - but I have before mentioned some few cases, where marsh miasmata, has been the remote cause of disease - the patients being of robust Habits it did not make its appearance till winter - or till the system had been debilitated from some cause, so as to take on the morbid action; which this Miasmata would would produce —

When disease occurs from this cause in the Winter the predisposing cause debility is induced by Cold. a proof that debility is the universal predisposing cause of Disease -

In Typhus there are no intermissions or remissions, as there are in Billious Fever - for such we call diseases, produced by Marsh Miasmata in Typhus there is seldom a discharge of bile. as I before observed -

3. From the arterial action in Typhus, being weaker, than in those diseases produced by Marsh Miasmata seldom requiring Bleeding - During the prevalence of Typhus in Camps. during the last american war, Dr Rush says he bled but few with Typhus - the action of the vessells, was so feeble -

4th. Typhus Fever is contagious - but diseases from Marsh Effluvia are not -

5th & 6. They may be known from the remote causes - the Marsh Miasmata acting most commonly in Autumn -

Billious fevers as they are called, are to be distinguished

1st - By their occurring in Autumn principally
2d - From intermissions, & remissions & a discharge of Bile -
3d - From more morbid action accompaning them than Typhus -
4th - From being in the vicinity of Marshes and stagnant waters -
5th - From the influence of heavy rains, checking its progress -
6th - From attacking Habits previously robust -

The Typhus state of fever may be distinguish from Typhoid, by a greater degree of debility greater quickness of pulse - Coma - Delirium Black tongue, dry at the edges & furred - fallen Jaw - Muttering - pale countenance - dry skin - the faces hard - more, or less, cough - voice hollow & unnatural - at the close, mania sometimes comes on - called by Dr. Cullen Typho - mania

Physicians who prescribe, for the names of Diseases only, would startle at the Idea, of bleeding in Typhus - But I would as soon bleed in Jail, or Typhus Fever as in Billious Fever - if the state of the System required it -

It may be proper in this place, to inquire into Sea Air, as it influences disease —

The air of the Sea Shore, has some peculiar properties, which renders it unfriendly to Consumption — Asthma — & Rheumatism — & to many other states of Disease — Hence we should never recommend a Journey to the sea shore — to patients labouring under Consumption, or Asthma — It is very common in the Country for people labouring under any Chronic complaint, to journey to the Sea Shore for their health — & I have observed in Consumptive people it generally proves fatal — this is owing to a mixture of the Land & Sea air rendering it too stimulating for patients affected with Pulmonary Consumption — it generally increases the Cough, & Inflammation of the Lungs — The stimulating effect may in a measure be owing to saline particles mixed with the air, these combind with moisture, renders the air on coasts peculiarly unfit for Pulmonic patients — Some authors have recommended sailing in Pulmonary Consumption — this is a proper prescription — as the motion of the vessell, & sea sickness promotes Absorption — —

But when we recommend sailing to our patients it should always be a Sea voyage - so far at sea as to shun the land air - for the reason just mentioned — In diseases of moderate morbid action, the air on the Sea shore is medicinal —

Persons after long Sea voages become subject to Catarrhs, from a mixture of land & sea air - I have heard Sailors say they could tell when they approached land, by their sneezing —

I shall make a few observations on the effects of situation in disease —

1st Persons who emigrate from one country to another more especially from a hot, to a cold climate are disposed to fevers - sometimes they are seized the first, but more frequently not untill the 2d year this is called seasoning to a place —

2d Persons who move from a sickly, to a healthy neighbourhood acquire diseases, which they would have escaped, had they not moved from a marshy situation where the change of air acts as the exciting cause. it is a new stimulus, to which the system is not accustomed —

3d Old people removing from a Marshy situation frequently die, from the loss of the stimulus of the Miasmata

- which becomes a healthy stimulus to old people - however poisonous to young people & middle age - The same occurs in plants which die if removed from the neighbourhood of Marshes &c &c

I shall now make a few observations on Epidemics -

1st - No two specifically contagious diseases can act at the same time on the Blood vessells - Mr. Hunter has proved that the Small pox & Measles cannot exist at the same time -

. . . . was said to have died of Small pox & measles at the same time - but this I do not believe; the action of one must be suspended during that of the other, & both operate in their turn from Contagion introduced into the system perhaps at the same time - I would as soon believe that a Horse could trot, & pace at the same time - as believe the system was capable of taking on the morbid action of the Small Pox & measles at once &c Hence we hear of Epidemics reigning, one superior in force assuming the sovereignty, & all diseases wear its Liveries Thus if Influenza is the reigning Epidemic, all diseases will put on that type - or be marked with symtoms of Influenza &c Thus fevers partak-

of the symtoms of small pox; (according to Sydenham) when that is the reigning Epidemic —

Huxham describes a fever with symtoms of the small pox; as sweats - Eruptions - sore throat &c -

Dr. Rush says that all the diseases in Philada. in 1793, partook of the nature of Yellow fever

Many symtoms may be explained by a knowledge of this fact - which otherwise we should be at a loss to explain —

Sydenham mentions that in 1670 Intermittents were Epidemic, & every other disease wore its livery - & even the small Pox had remissions & exacerbations -

In 1671 & 2, the small pox reigned in London, & every other disease disappeared for a while, or else assumed the symtoms of small pox — thus we see, Epidemics not only force other diseases to put on their livery, but chase them from their presence —

Epidemics, differ in degree, of their relative force - thus the small pox, is more powerfull than the Measles — When the small pox rages, the measles disappear But in the close of the reign of the small pox. the Measles become more active, & assume the Sovereignty - I said, the reigning Epidemic, chaces away every other disease - In 1764 & 5. the Plague had no rival in London.

The measles 1709 banished all other diseases from Philad.
& the measles often chase away Influenza —
Contagions do not act on every person at the same time
but they are seized unexpectedly when they suppose
themselves free from danger. this happens from the
impression of exciting caused, at sometimes more
more than at others —
2d — They vary in their attacks, as to force & violence
in some they appear with all their symtoms
in full force, while in others they are so slight.
as hardly to be recognized — Or they may be com-
-pared as they appear in different people, to re-
-presentations of things — some in Wax work —
as large as Life. & in others it may be compared
to a picture done in water colours —
3d — Epidemics gradually loose their force
it is from this circumstance many
medicines get the credit of curing diseases.
which have been used, in the decline of the disease
& many Physicians have obtaind great celebrity
by commencing practice in a place, on the
decline of a mortal Epidemic —
4th — Epidemics attack Inhabitants of one country
only — thus in the year 1793 West Indians
& Frenchmen escaped the yellow fever in Philad.

which then prevailed among the other inhabitants of the city — Jews, & Italians were exempted from the Epidemics of Germany — the Epidemic prevailed among the Englishmen only - thence it was called the English Sweating Sickness - Epidemics originate in all countries, & after they are formed, they are propagated by Contagion as the Small Pox — thus contagious diseases may be carried a great distance & propagated by contagion, from infected Cloth. Cotton & the like —

Epidemics change from one to another - thus you must watch Epidemics, with a Spye Glass & a Microscope, every year - every month - every week - & every Day — —

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